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THE REALM OF MIND

AN ESSAY IN METAPHYSICS

BY

FREDERICK J. E. WOODBRIDGE

Νῦν δὲ περὶ ψυχῆς τὰ λεχθέντα συγκεφαλαιώσαντες, εἴπωμεν πάλιν ὅτι ἡ ψυχὴ τὰ ὄντα πώς ἐστι πάντα. ἢ γὰρ αἰσθητὰ τὰ ὄντα ἢ νοητά, ἔστι δ' ἡ ἐπιστήμη μὲν τὰ ἐπιστητά πως, ἡ δ' αἴσθησις τὰ αἰσθητά· πῶς δὲ τοῦτο, δεῖ ζητεῖν. ARISTOTLE, *De anima*, 431 b 20.

Homo cogitat, SPINOZA, *Ethica*, Lib. II. Ax. 2.

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PREFACE

Some of the positions taken in this essay have been developed with more detail in articles which I have occasionally published.[1] It was once my intention to bring these articles together in a book. That intention was abandoned because I concluded that the publication of the articles together would, on account of the character of the individual topics with which they dealt, distract attention from the principal thesis. It seemed better, therefore, to present this thesis in its more prominent outlines alone. This I have now tried to do in a manner which may be too brief and condensed, but which has, I hope, the advantage of making what otherwise might have proved distracting, illustrative of the main contention. Furthermore, the articles, dealing, as they did, so much with "consciousness," suffer, in my judgment, from the too controversial character of that term. I would let "consciousness" mean what anybody cares to let it mean in the hope that thereby the implications of thinking

[1] See appendix.

may be followed out independently. That hope may be illusory, but I have it. For I believe that, starting with the obvious fact that man thinks, an inquirer is apt to follow a different road than he is likely to follow if he starts with an antecedent theory of consciousness. Every exposition of the antecedents or conditions of thinking is an exercise of thinking. For my part, I can not disregard this fact, although I am well aware that some regard it as trivial and others as warrant for attempting to deduce from the operations of thought alone, the categories in terms of which nature is to be understood. Instead of putting thinking outside nature or making nature its product, I have tried to take thinking simply as a natural event and follow its lead, letting the consequences take care of themselves.

And the major consequences seem to me to be, first, that mind as a logical structure of existence is antecedent to thinking, and, secondly, that our thinking as individuals is a bodily activity congruent with that structure. Put in terms of a favorite illustration, thinking and walking are different ways of getting about in a common world which has a make-up agreeable to each of these ways. Or again, as our digesting involves a chemical world, so our thinking involves a logical world. And as by

digesting we do not introduce chemistry into a world not already chemical, so by thinking we do not introduce logic into a world not already logical. Both the chemistry of things and their logic are discoveries. Such is the thesis to be developed.

The essay is one outcome of my reading in philosophy. Yet I acknowledge with delightful remembrance three incidents which have markedly influenced the writing of the second chapter. One was a casual conversation with Professor Pupin during lunch at the Faculty Club of Columbia University. We began with fishes and ended with stars, an excursion led by him in the realm of communication. He had the near and the far linked by media which let what one did find its way to the other to be reflected back again—a world of signals whose messages even the atoms caught and illustrated in their motions. Cause and effect took on fresh meaning as near and far replied to each other. A second was an address on foreign exchange to the students of the same university by Mr. Dwight W. Morrow. He began with the exchange of paper in Wall Street, went on through the exchange of commodities between different parts of the earth, and ended with the exchange of ideas, ambitions and hopes between men, until the adjec-

tive "foreign" disappeared from the world's vocabulary. This leading of us by a consideration in economics from paper to ships, from ships to goods, from goods to labor, from labor to sustenance, from sustenance to hopes, from hopes to vision, revealed a world in which exchange is essential not only to buying and selling, but also to living and understanding. A third was a conversation between two girls, deaf-mutes, in a Fifth Avenue bus. So agile were their fingers and so mobile their faces that I was fascinated in watching them. Unexpectedly I asked myself what would happen if one of them exclaimed, "Matter is indestructible"? A miracle, and yet the common miracle of all language, for language is ever matter in some shape—fingers moving in space, sounds vibrating in air, marks showing in light, synapses charging and discharging in brains—matter, matter everywhere, the one and only means of conveying its own indestructibility. We describe matter in figures of speech because *the figure* of speech is what matter indestructibly is.

FREDERICK J. E. WOODBRIDGE

Columbia University, March, 1926.

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I

THE REALM OF MIND

The contention of the following essay is, that when we attempt to define the mind, we are led ultimately to consider, not an individual agent or being which thinks, but the realm of being in which thinking occurs. The thinking agent is evidently ourselves, or beings like ourselves, so it is not unnatural to speak of ourselves as many minds taking thought of the world. And it was, doubtless, the fact that we think, which originally prompted human speech to utter such words as "mind," and to enrich the literature of many languages with an imposing vocabulary of spiritual terms. Yet when we proceed to analyze ourselves with the purpose of discovering what it is we think with, we find nothing to explore except our bodies. They proclaim themselves to be the agents of thought and the subjects of all our experiences. Although we may still call ourselves minds, we should be under no illusion that thereby we had discovered in our bodies

something different from them which could properly be called a mind. We discover in them no mind at all. And yet they think. To explore this fact carries us beyond ourselves to what we think about, to the realm of being in which our thinking is an event and to which our bodies belong. Then it is that this realm of being discloses itself as so connected that we can discover what one fact or event in it implies in terms of other facts and events. We discover ourselves to inhabit a realm of being which has a logical structure. That I take to be the discovery of the essential nature of mind.

I

In analyses of the kind here proposed, it is common to operate with the distinction between the mental and the physical. The distinction is not the invention of philosophers. Each of us is led to make it when we express in words what we do. We think, perceive, remember and imagine; we walk, sleep, digest and breathe. Our activities are many, and when we attempt to classify them, they fall naturally into two major classes which are distinct enough to be denoted by distinct names. Thinking, perceiving and remembering are so different from walking, digesting and breathing, that it strikes

us as inappropriate to call them all by a common name without any qualifying adjective. The one set is mental, and the other, bodily or physical. So obvious and so insistent is the distinction that it has never been successfully challenged. The mental has never been successfully reduced to the physical although there are good reasons for believing that it is always associated with the physical. Nor has the physical ever been successfully reduced to the mental, although some philosophers have attempted so to do, impelled by the logic of their own speculations.

The distinction is primarily between activities and not between objects. The history of language is one proof of this. It is clear that originally words which expressed the mental and the physical, expressed what objects do rather than what they are. Common speech no less than poetry keeps the habit still. The great ship responds quickly to the rudder's bidding, and the wind bloweth where it listeth. With the growth of language objects took on the character of their activities and could be named in terms of what they did. That which moves could be called physical, and that which thinks, mental. A second proof may be found in our scientific habits. We deal experimentally with the mental and the physical in ob-

jects primarily in terms of their behavior and motions rather than in terms of their qualities. Man is a thinking being and a walking being; he is both mental and physical. He has a mind and a body, not because one object properly called a body and another, a mind, have conspired to produce him, but because he thinks and walks.

So the distinction gets transferred to objects. One could make long lists of things called either mental or physical: thoughts, ideas, sensations, concepts, feelings, hopes, fears, loves, hates, hypotheses, theories, memories, images; bodies, motions, places, times, energies, forces, earth, air, fire, water. There may be doubt of the proper classification in some cases even in so brief a list, but the list is illustrative. There may be doubt also whether each term in such a list represents the concretion into a noun of what was originally a verb, but at least the suspicion of it is there. This suspicion is strengthened rather than weakened whenever we try to tell what each of these things is wholly apart from the activities the terms imply. What is a thought unless there is something thought about, what is a motion, unless there is something moved? What is a mind unless there is mental activity, or a body unless there is physical activity?

It is tempting to pursue the distinction between the mental and the physical further, following its lead as it has dominated human living. It has shaped man's literature, art, society, religion, science and philosophy, his whole civilization, indeed—all which is sufficient proof of its validity and its power. But I am engaged in a rather technical piece of analysis. Not the glory of the mind, but its metaphysical status, is my theme. Here, too, the distinction between the mental and the physical is primarily a distinction of activities. Although we may distinguish objects also by these terms, the distinction is transferred to them, not derived from them. We may, for example, distinguish the mind from the body, but back of that distinction lies the fact with which we really begin, namely that we think and so are minds, we walk and so are bodies. Or if we should use a noun instead of a pronoun for the subject, then it is man that thinks and man that walks, so that man comes to be regarded as a mental and a physical thing, to be a mind and a body. That is, it is what the man does that divides him into body and mind. Metaphysics, no matter how much it has exalted the mind and set it over against the body, has never succeeded in revealing by analysis a mind and a body as primary facts from

which the distinction between the mental and the physical is derived. We may give a man a mind to explain his thinking and a body to explain his walking, but these gifts are not analytical discoveries. Man is not found possessing them, even if they are claimed as property rightfully his.

For analysis, then, the object which thinks and walks, which acts mentally and physically, is one and undivided. If, after analysis, we are constrained to convert him into two objects joined together, we find ourselves defining these objects in terms of what the man does, in terms, that is, of activities which were distinguished in him before these objects were invoked to explain them. Metaphysics thus follows and may refine the uses of common speech. We need not be metaphysicians to claim mind and body as our rightful possessions. For just as it is natural for us to speak of a man who walks far and lustily, as a great walker, and to endow him with a strong body, so it is natural for us to speak of him who thinks profoundly, as a great thinker, and to endow him with a great mind. Thus common speech condenses into single words meanings which require many sentences for their full expression. Such words economize speech and give to language its wealth of significance.

They come to denote rich fields for exploration. Originally, however, they arise through a transfer of meaning and not in the discovery of something new to be denoted. And this is true whether we are metaphysicians or not.

II

If in the analysis of the mind we were content to be rigidly controlled by such obvious considerations as these, we might avoid many ambiguous, although possibly delightful, excursions in philosophy. There would not be lacking philosophical opportunities. To explore the reach of man's thinking and walking, to discover where he has been and might be led, to find out what his thinking and walking implies about the make-up of the world he inhabits—all this could occupy all our leisure. The distinction between the mental and the physical would increase in richness, man's mind and man's body would mean more and more. Man might walk earth as a body and as a mind claim heaven, without, however, so disjoining his original unitary being into two component parts, that he leaves earth and loses heaven in his efforts to get the parts together. In simpler language we may say that it is possible to examine the mental and phys-

ical in man's life in terms of what he does, for undoubtedly he thinks and walks; and such an examination can proceed without supposing that man is made up of two distinct parts, one a mind which thinks and the other a body which walks. If, however, this supposition is made, it becomes increasingly difficult to understand how the same being can both think and walk, or how his body can possibly carry him to the place which his mind chooses.

Such a supposition, however, we seem often impelled to make. The distinction between the mental and the physical in terms of what we do, is obvious enough. Equally obvious is the distinction between mind and body, if by mind we mean only all that is mental, and by body, all that is physical, and so come to speak of ourselves as having a mind and a body. These distinctions, however, become complicated on reflection. The body is, perhaps, the chief source of complication. For we use the term not only to denote ourselves as physical in distinction from ourselves as mental, we use it also to denote our bulk, the assemblage of the head and trunk and limbs. This body occupies space, endures in time, has cubical contents, and is built in a definite way. As such, it is not strictly *the* body in distinction from the mind, but *a* body in distinction from other

bodies, other bulks, other things which occupy space and endure in time, the bodies of other men, of trees, of rocks, of the earth, of the stars. Space is full of such bodies, and, as we contemplate them, our interest is not primarily in any contrast with mind, but in their shapes and sizes, their composition, their motions and their relations to one another. Taken together they compose our first view of the world we live in. Or perhaps I ought to say, we soon discover that we live in such a world, and seek to understand it both to satisfy our curiosity and in order to live well in it.

Our first efforts at comprehending it are, doubtless, very naïve. Primitive men and children think of it as peopled by the bodies which fill it. Angry storms rage in it and the sun shines with consideration. It has, however, become largely depopulated through exploration. As a world of bodies simply, we have come to think of it no longer in terms which lend a passion to the thunder. It has become the physical world. So physical has it become that any attempt to impart to it the motions of a mind is apt to be regarded as altogether unnecessary. For when we address ourselves to what these bodies do, and expect an answer in terms of their relations to one another as bodies, we find that their activities are phys-

ical. We do not say that they walk, for that smacks too much of the physical activity of those that think. We say that they move, they separate and they combine. The sciences of physics and chemistry aim to exhaust all we can know about them without once invoking mental activity as an item in their behavior. The physical world is not a mental world.

And yet it is the world we live in. Our bodies inhabit it along with other bodies. In it we do our thinking. In it the sciences of physics and chemistry pursue their triumphant way. We might, possibly, be content to take this situation resolutely, without anxiety. For, evidently, the physical world should be construed in physical terms. To construe it in mental terms would be to vitiate its character as physical. Why attempt the profitless? And since no matter how we construe the physical world, it does not prevent our thinking about it, why not take the fact of our thinking as the simple fact it is? Most of us do. And we take physics and chemistry along with it, never disturbed by the suspicion that thereby we have made real knowledge of the physical world impossible or made the mind's hopes illusory. In this we are practically wise, for we reap the benefits of science and enjoy the exercise of the imagination.

But practical wisdom is not theoretical insight. To construe the world of bodies as wholly physical, and yet to live in that world, to think about it, to hope, envy, threaten, pardon, spare, is to be confronted with a situation which thoughtful men have taken seriously. The situation is complicated. Our thinking can not be denied. Nor can it be denied that it is we who are bodies that do the thinking. And yet, to the constitution of the physical world, of which our bodies are parts, anything like mental activity seems to be wholly irrelevant. How can the situation be construed so that the facts of mental activity and a physical world are compatible? This is a question for metaphysics. More than any other, perhaps, it has engaged the attention of philosophers since the days of Locke and Newton.

It is not my intention to review here the answers which have been given. It is, rather, to work out the answer to which the body of literature on the subject seems to point. I shall try to do this constructively, following, however, at first, a line of argument which ends in disaster. This I do, because it is not unnatural to follow this line, and also because, by following it, we may be led to a point of departure more promising than that which the argument takes as its own.

III

If we mean by mind all that is involved in mental activity, how then is the fact of mind to be construed as compatible with the fact of the physical world? That world is the world of physical bodies, our own among the number. These bodies are objects of our thinking, but it is clear that we do not come to think of them unless they first stimulate the sense organs of our own bodies and thereby excite nervous impulses which are carried to our brains. There is thus a physical process antecedent to or coincident with thought. But if we take this physical process as the point of departure from which to construe the mind, we seem to be inevitably driven to strange conclusions. We seem forced to assume that there is something in us which responds to this process in such a way that we think of the world. This something we call a mind. Thus we endow our bodies with an agent which, through the mediation of the body, thinks of the world of bodies. It is easy to make this assumption in words and to be hypothetically generous with our bodies. The assumption, however, worked out to its bitter end, destroys itself.[1]

[1] Locke and Kant have made the classic statements of this assumption as follows:

For if the mind lays hold anywhere of the physical process which leads it to think, it lays hold of it in the brain. But the brain does not contain the bodies which stimulate it. They are exterior to it. What they accomplish is not the dislocation of themselves, but effects within the brain itself. So we seem forced to conclude that the immediate objects of the mind are nervous processes in the brain. But this is clearly untrue. A tree may stimulate a

"Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas; how comes it to be furnished? Whence comes it by that vast store which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer in one word, from experience; in that all our knowledge is founded, and from that it ultimately derives itself. Our observation employed either about external sensible objects, or about the internal operations of our minds, perceived and reflected on by ourselves, is that which supplies our understandings with all the materials of thinking. These two are the fountains of knowledge from whence all the ideas we have or can naturally have do spring." *An Essay concerning Human Understanding,* Book II, Chapter I, Section 2.

"Dass alle unsere Erkenntniss mit der Erfahrung anfange, daran ist gar kein Zweifel; denn wodurch sollte das Erkenntnissvermögen sonst zur Ausübung erweckt werden, geschähe es nicht durch Gegenstände, die unsere Sinne rühren und theils von selbst Vorstellungen bewirken, theils unsere Verstandesthätigkeit in Bewegung bringen, diese zu vergleichen, sie zu verknüpfen oder zu trennen, und so den rohen Stoff sinnlicher Eindrücke zu einer Erkenntniss der Gegenstände zu verarbeiten, die Erfahrung heisst? Der Zeit nach geht also keine Erkenntniss in uns vor der Erfahrung vorher, und mit dieser fängt alle an." *Kritik der Reinen Vernunft,* Einleitung, Section I, Second Edition.

brain, but what the mind thinks about is not a brain process, but a tree. The moon which is thought about is not the nervous processes which may attend the thinking of it. So true is this that reflection on its truth, if we still cling to the physical process and the assumption it forced us to make, leads us to conclude that, although nervous processes in the brain are the immediate occasions of thought, the immediate objects of the mind are never brain processes. They are something else, something with which brain processes are somehow correlated. They are not, however, the external bodies which stimulate the brain, for the mind, being intimately associated with the brain alone, has no contact with these exterior bodies.

What, then, are the objects of the mind? About what is it employed in all its thoughts and reasonings? Our point of departure and our assumption of an agent mind in the body has forced us to exclude the world of physical bodies. But what is left? We can answer only the contents of the mind itself. And to make it quite clear that by the contents of the mind we do not mean physical bodies, we give to these contents such names as perceptions and ideas. What the mind thinks about, then, is its own perceptions or ideas. These constitute a

mental world of their own in which all our thoughts and reasonings proceed. We are thus confronted with two worlds, a world of physical bodies from which the mind is wholly excluded and a world of perceptions and ideas from which the physical world is wholly excluded.

However, to exclude the physical world from the world of mind is to lose all contact of thought with it. If in all our thoughts and reasonings we have no other objects than our own perceptions and ideas, and these are not physical objects, it is not at all clear what physical objects are. We started with them to reach the mind only to lose them when the mind was found. They appeared to be facts to begin with, but what are they now? We talked easily about the domain of physics and chemistry, as if it were readily accessible to our thinking, but now we find it excluded. We can no longer start with it. We can start only with our own perceptions and ideas. Having lost the physical world, we may still believe in it, but how is this belief to be accounted for? That world, although we took it originally as a fact, is now a world the existence of which has to be established. It has become a problem.

In following this argument which has converted the physical world from a fact into a

problem, we have spoken of the physical world naïvely. It has been the sum of the bodies in space and time which are discovered to be related to one another in physical ways. It was taken as what we call the physical world of common sense with all its diversity of objects and qualities. It was the world we look out upon, the world of other men, of plants and animals, of the earth with its multitude of things, and of the sky with its heavenly bodies. It was rich in quality, colorful, odorous, resonant. But the argument has impoverished it. Approaching the fact that we think from the standpoint of the physical process involved, the argument leads us to deny of the physical world all this qualitative richness. For observe. Yonder tree which I perceive is undoubtedly green. But it is now, not a body in the physical world, but a perception in my mind. Its qualities are there. Its counterpart in the world outside is a physical process, something to be defined in terms of motions, vibrations, excitations, and what these terms imply. So it is no longer quite proper to speak of the physical world as a world of bodies and qualities. These become refined. They give place to the entities of chemical and physical science. Quantitative considerations dominate. The physical world becomes a vast system of mechanical relations.

It may well be such a system. Positive science increasingly affirms it no matter what metaphysics has to say. The question here is not the validity of the conception. It is, rather, what can metaphysics make of it, if the physical world is excluded from the mind? By the compulsion of our argument, we are confined in all our thoughts and reasonings to the mind and its contents. Consequently we can not take the physical world naïvely, as something primary and indubitably given to start with. We must find reasons for believing it exists. We must show how, by dealing with the contents of the mind, we are led to a conception of a physical world. But if that is the way we arrive at it, then it becomes wholly a product of the mind itself. It is a system of ideas which the mind works out or builds up in view of its own contents solely. It is a product of these contents. It is no longer a world of bodies initially set over against a world of mind. If it is located anywhere, its location must involve some kind of mental projection.

It seems clear, however, that the argument which leads to this conclusion defeats itself. Starting with the physical world and its processes, it was led to assume an agent mind. It reaches the conclusion that the physical world is not after all something with which we start,

but something at which we arrive. In its most condensed form it runs as follows: The physical world requires a mind in order that it may be known, but the mind knows no other physical world than that which it constructs out of its own contents. This is scarcely intelligible. That such a piece of metaphysics should hold a respectable place in history, is due, I imagine, not to the coherency and intelligibility of the argument, but to the obvious fact that we discover the physical world by thinking, and, when we have discovered it, it is found to be something radically antithetical to thought. It is objective to thought and yet somehow thought's achievement. This fact, the argument with all its attendant philosophy does most emphatically disclose in spite of its vitiation by unintelligible assumptions. And these latter ought to afford abundant evidence of the unsoundness of any metaphysics of the mind which begins with the physical process involved in thinking and assumes an agent quite independent of that process to do the thinking.

IV

We may, however, learn this much from the argument. If the mind—and, for that matter, the physical world also—is to be metaphys-

ically construed, we must begin with the processes of thought. Whatever the physical world may be, they discover it. Our thinking is intimately connected with it, constructs it, if you will, but, in constructing it, we never deal with anything except the immediate objects of thought itself. Consequently, if mind means anything more than the fact that we think, some additional meaning may be expected from a consideration of what we think about. We are thus led to explore a realm of being, the realm in which our thinking occurs in all its obvious concreteness. We take the point of view of unsophisticated inquiry. We are not concerned with any speculations about the origin of thought. We are not concerned with the natural history of our experience or a psychological exposition of how we think. We are concerned only with the reaches of thought as we think about the common objects of every day and try to gain some understanding of them and their relations to one another. We take the world as common sense takes it and ask ourselves what we think about.

Obviously we think of many things. The argument we have been considering was induced to give to them all a common designation. It called them ideas, the perceptions or contents of the mind. By so doing, it sought

to emphasize their non-physical character. It intimated that they are made up of a quite different sort of stuff than that of which the physical world is composed. We may still give them a common designation. We may continue to call them ideas or the perceptions of the mind, affirming that in all our thoughts and reasonings we have no other objects than our own ideas. By so doing, however, we do not mean what the argument means. If we call them perceptions, it is not in order to define their own character. It is rather to emphasize the fact that they are perceived. If we call them ideas, it is not in order to imply that they are made of the stuff of mind. It is rather to keep before us the fact that we think of them. In other words, calling all the objects of thought by such common names as perceptions and ideas tells us absolutely nothing about their own nature. It tells us only that we are cognizant of them. Otherwise it would do equally well to call them things. This latter designation would illuminate them no more than the others and no less. Indeed, gathering together all objects of all thought into one assemblage and then giving to them a common name, is apt to produce a great illusion. We may be deluded into supposing that we have done something significant, when, as a matter

of fact, we have only been trying to speak most generally. All we have really done is to affirm, for example, that whatever we think about is an idea and an idea is whatever we think about. But precisely what the whatevers are, is left wholly undetermined. By using the term "idea" as a general term for all objects of all thought, we have robbed it of all other meaning.

What, then, do we think about? The complete answer to that question would comprise the encyclopedia of human knowledge. The question is not asked here, however, in order to undertake such an unlimited excursion. It is asked, rather, to bring home to us at once the vastness and immensity of a comprehensive and accurate answer. It is asked to reinforce the considerations of the preceding paragraph, to show how hazardous an enterprise it is to reduce everything we think about to a common denominator, and to exhibit the rash folly of supposing that by giving to that everything a common name, we have done something significant. If such names, rendered colorless by their so vast extension, are denied us, we should do well to come to particulars.

We think about the discovery of America and the next appearance of Halley's comet. We think about the North Pole and the other

side of the moon. Although our days are numbered and our steps measured, we can think of times when we neither were nor shall be, and of places far beyond the possible tread of our feet. Thinking finds no limits in time or space. To say this is not necessarily to indulge in rhapsody, although rhapsody has often been provoked by saying it. We are noting an obvious and commonplace fact. Kant was so impressed by it that he tried to find for it a transcendental explanation. Others also have converted it into a problem, asking how it is possible for our thinking, which is a present fact, to refer to facts which are not present. I have no desire to convert it into any such problem, for when I do, I can find no solution of it. All solutions with which I am familiar take the fact for granted and then speedily forget that they have done so. They run somewhat as follows: I think of a past event; now my thinking is in the present and its object in the past, there is a time interval between them; this interval is bridged by the reference of the present event to the past event, the former is the representative of the latter; the present event thus transcends itself either because it is its nature so to do, or because the ground of its transcendence is time. Such an argument appears to me only

to affirm that I, who am here and now, think about what is neither here nor now. If it is offered as a solution of a problem, it perplexes me. I am perplexed, for example, about that time interval. Is it also an object of my thinking? If it is, how is my thinking of it explained by the solution? It is not explained by stoutly insisting that a present event transcends itself and represents a past event, for that is only to insist that as a matter of fact we do think about the past. The Kantian position appears to be more profound, since there is something quite genuine in the claim that all spatial and temporal thinking presupposes time and space. It is only the nature of the presupposition which is troublesome. Kant made of it a mystery which an impressive vocabulary could do little to alleviate. In the end it appears to mean no more than the fact that thinking finds no limits in time or space. Although we are here and now, we think about events and facts remote.

This fact is taken here as defining in some measure the domain or realm in which thinking goes on. It is taken naïvely, without sophistication. Accepting the fact that we think, any consideration of the possibility of thought carries us, if we follow the lead of what we think about, to the acceptance of thinking as

an event in time and space, as an event, that is, in the same realm of being in which are the objects of thought. Although we may walk with our legs, we do not walk in them. Likewise, although we may think with our brains, we do not think in them. It is the world of time and space in which we think, just as much as it is that world in which we walk. Our brains and legs are instruments of different types of activity, but they can no more operate of themselves than a hammer can drive a nail of itself. They operate in connection with the rest of things, they operate in space and time. Yet we have a habit of saying that thinking goes on in the mind. If this is more than a fashion of speech, if the mind is, metaphysically, the domain of thought, then, in considering it, we are evidently not considering an agent which thinks, we are considering a realm of being in which thinking occurs. At any rate, thinking is so bound up with the objects of thought that we find ourselves dealing with their world in every attempt to deal with its. It seems idle, therefore, to say of the mind: "Lo, it is here, or lo, it is there." Since we think beyond our body's place and our life's duration, there is no intelligible divorcing of time and space from the realm of mind.

V

I am well aware that these statements will be received by some readers with impatience. They may say that since the world in space and time existed long before we thought of it and will exist long after we have ceased to think, it is silly and senseless to hint that the realm of mind is coextensive with time and space. Others may say that since we never think unless we are stimulated thereto by objects in space and time which affect us and produce effects in us, it is only these effects which can properly be said to be in the realm of mind, while the realm of time and space is forever outside. Still others may say that the position I have suggested is, after all, nothing but the Kantian position disguised, with all its implications; that I am really making time and space *a priori* forms of sense perception.

I freely admit that the world of space and time existed long before we thought of it and will exist long after we have ceased to think. The fact admitted is impressive, but it is difficult to discover how it limits the reach of thought, since we write histories with confidence and conviction, and make scientific predictions with the certainty of their fulfillment. It is very troublesome to guess how we could

do these things, if our thinking were cut off from the subject-matter they involve. At best the greater duration of the world, impressive as it is, proves only that we are not thinking from everlasting to everlasting. It proves nothing about the objects of which we think or about the extent and reaches of our thought. Furthermore, attention was asked to occasions when we think, not to occasions when we do not. And it seems well-nigh incredible that anyone should believe that we are not thinking of the antecedents and consequents of our own existence, while we are spending so much industry and enthusiasm in investigating them. For it is so easy to ask, if we are not thinking of them, of what are we thinking? To answer that we think only of the present and infer the past and the future, is not helpful. For the haunting question returns, If it is not the past and the future which are inferred, what, pray, is it? Is there any magic in changing "thinking" to "inferring" which can change the present into the past or future, or transform the objects of thought into something which they are not? However occasional our thinking may be, no limit seems to be set to the reach of thinking itself. No limit is set thereby to the realm of mind.

Again, I freely admit that we never think

unless we are stimulated thereto by objects in space and time which affect us and produce effects in us, and that these effects are in us and not outside us, but I can make nothing intelligible out of the statement that these effects only are in the realm of mind, while the realm of space and time is forever outside. I can understand, I think, how such a statement comes to be made, and I have already outlined an argument which leads to it, but as a statement by itself I do not know what it means. For again I am forced to assert the obvious. Having been stimulated to think in the way described, what do we think about? Surely, among other things, of a world in time and space outside us, of the objects in it, of their stimulating us, of the effects produced in us, and of the fact that these effects are in us and not outside. So again I can not see how the fact that we are prompted to think limits the reach of our thinking, or sets intelligible boundaries to the realm of mind. Distinguish between within us and without us as much as we please, that distinction does not make what is without us inaccessible to thought, nor limit the realm of mind to what is within us.

Perhaps the position I have suggested is a disguised Kantianism. I dislike to think that it is, because I dislike the *Kritik der reinen*

Vernunft so much. As every reader of it must confess, it is among the most stimulating of books, but I must also confess that I have found it very confused and much of it very unintelligible. But the study of the history of philosophy has taught me again and again the truth of one of George Meredith's aphorisms: "Our new thoughts have stirred dead bosoms." So it may be that I have been trying to say in different words what Kant himself said. Kant dealt with what I have called the realm of mind, and insisted that space and time belong to it, but I can make nothing of the doctrine that that realm is a compound of what the mind contributes and what something else contributes. So when I say that time and space are in the realm of mind and that realm in time and space, I do not at all imply that the mind is responsible in any way for time and space. I do not imply that time and space are in any sense mental or forms of sense perception. I fear I have no idea of what an *a priori* form of sense perception in the Kantian sense could possibly be. For me the realm of mind is analyzable, but it is not analyzable into factors which once came, or ever do come, together to compose it. The position I am putting before the reader is much more obvious and simple, so obvious and simple that sometimes I think

it is absurd to make so much a matter of it. My justification to myself is the fact that I find it so repeatedly overlooked and overlooked with so much detriment to metaphysics. What I am saying is this: since, when we think, no limit is set by time and space to what we think about, our thinking goes on in a realm where time and space are accessible. I make no attempt to show why this is so. But since it is so, it is clear to me that we can think of events so remote in time as the discovery of America, and so removed in space as the other side of the moon. Now if the domain in which thinking goes on is the mind, then I say that the realm of this accessibility is the realm of mind, and that, consequently, when we deal with the mind, we are dealing, not with a place or an event, but with a realm.

VI

Again, what is it we think about? Of places and events, surely, but these places and events are not empty. They are filled with a variety so bewildering that all our attempts to cover the items and arrangements of it with some common term, end in refuge in that most general and most abstract of all our terms, "being." Our thinking concerns not only such bound-

less reaches as time and space open to us, but qualities and quantities, individuals and continuities, objects and their relations to one another, laws and sequences, elements and compounds, dreams and fancies, illusions and realities, beauties and goods, truths and errors, thoughts and things, likenesses and differences. By some such catalogue of general terms we try to mark out the varieties covered by the still more general term being. Asked to be more explicit, we speak of chemical elements, physical bodies, forces, atoms, molecules, ions, sensations, habits, dispositions, plants, animals, rocks, societies, governments; or again, of men and women, lettuce and tomatoes, colors, sounds, tastes, smells, contacts, cold and heat, pains and pleasures; and finally we resort to proper names of some sort which refuse to lend themselves beyond a single application. A complete list of all such designations could not fall short of the complete dictionary of human speech. In other words, the attempt to tell in full and in detail what we think about, involves, not at all a single term nor a single proposition, but the whole apparatus of language. We may say that we have found it necessary to develop that apparatus in order to go even a little way in denominating the "whatevers" we may be employed

about in thinking. Now all these "whatevers," constituting as they do the realm in which thinking goes on, constitute also the realm of mind.

Again some readers, as I can well imagine, may interpose at this point, and ask, is not all this a disguised Berkeleyanism? Is not all this simply saying, *esse est percipi?* Our position is similar to Berkeley's, but it is also dissimilar. Much that he said can be readily translated into the language here used. He was fond of asking what it is that we perceive, and of answering that we perceive precisely what we do perceive and nothing else. He was fond of saying also that when we perceive, what we perceive is in the mind. So it may very well be said that Berkeley conceived the mind to be a realm of being in much the same way as is here suggested. But he went farther than this. He asserted, not only some coincidence between the realm of being and the realm of mind, but also that the realm of being —all the whatevers in time and space, together with time and space—about which we think, exists only when it is perceived, or, as I should say, only when it is thought of. If this is true, it is not true in terms of the position I am setting forth. If it is true that whatever we think about is in the realm of mind, it does not

at all follow that whatever we think about exists only when we think about it. One must pass to a position quite different from that which is here stated even to hint at such a conclusion. For the contention that existence depends on being thought of can not be intelligibly stated in terms of what I have been saying. For I have said that we think of things that existed before we thought of them. That they existed only because we thought of them, is a conclusion which can not be understood in terms of the premise from which it is drawn. We must go beyond it and affirm that we can think about something which is not created by our own thinking, only because it has been created by some other thinking, if we are to make, in any sense whatever, all that exists depend on being thought of. There is no warrant for such a going beyond in the position I have been setting forth. It is true that we can not *affirm* that anything exists without thinking about that thing, but this fact, although Berkeley seems to have set great store by it, is a trivial foundation for the doctrine *esse est percipi.*

No; the position, although similar to Berkeley's, is not identical with it. It is far less sophisticated. I am not affirming that the realm of being depends on mind or is created

by it. Nor am I affirming that it exists because we think of it. Affirmations of that kind are quite unintelligible to me. Although, as I have hinted before, I may be able to understand how they come to be made, I can make no sense out of them when they are made. I am affirming that when the term "being" is stretched to its widest extent, thinking goes on in the realm that term covers and in no other realm; and also that if we say that the scope of thinking defines the mind, or if we say that what we think about is in the mind, then the realm of mind is coextensive with the realm of being and the realm of being is in the mind. This affirmation is not free from ambiguity. It is probably not clear. But I hope the ambiguity will be reduced as we proceed and the obscurity lightened.

VII

When we attempt to describe the realm of being comprehensively, that is, when we attempt to tell what it is that we think about, language takes on a constitution marked by degrees of generality. "Being" is our most general term and quite logically so. For, when we ask in the most general way what anything is and expect the most general an-

swer possible, we can do nothing but translate the question into the indicative form of speech and say that anything is what it is. That is, it is "isness." But this expression is barbarous. We use instead the participle "being," transforming it into a noun. Aristotle long ago gave the classical analysis of this trick of speech. And a trick of speech it is so evidently that it seems strange that anyone—but there have been many—should find the term "being" a source of knowledge and inspiration. It is so clearly the expression of our attempt to speak most generally, that we ought not to suppose that by the use of it we speak most significantly. Here is where a great illusion arises. A term potent enough to gather under its wings all objects of all thought arouses the penchant for magic in us. We begin to say that the objects of thought *have* Being, that Being necessarily is, that without Being nothing can be nor be conceived, that to know Being is to know fully and completely, and that to rest in Being is to rest peacefully. All this is true enough participially, but its value, after all, is only that of linguistic rhapsody.

In speaking, therefore, of the mind as a realm of being, the accent falls on realm rather than on being. We are speaking of a region inhabited rather than of the inhabitants of

that region. To be sure, these also are beings. Calling both them and the mind by a common name does not reduce them to a common character or make the quality of the one identical with the quality of the other. So that when we call the mind *a* being, we say no more about it than that it is, but when we call it a *realm*, we begin to tell what it is. And the same is true of its inhabitants; when we call any object of the mind a being, we say nothing beyond that it is, but when we call it a body, for instance, we do. Furthermore, in speaking of *the* realm of being and of mind as *a* realm of being, we are naturally suggesting that there may be realms of being, of which the mind is one, and also that *the* realm of being in its widest possible extent contains the mind. All this is taken for granted, and so taken, I hope, without illusion. Yet taking it for granted is not without implications.

The degrees of generality which mark the constitution of language show us very clearly that our attempts to tell what we think about tend to become unified in a number of unified and coherent systems which we call knowledge, the sciences, or the branches of learning. Furthermore, as the term "branches" suggests, all these systems point to a single system of unified and coherent knowledge. That is, the

various divisions of learning are not so sharply set off from one another that it is impossible to find connections between them. This fact stimulates us to consider these connections and to try to bring them together in such a way that the unity and coherency of knowledge will be exhibited. Knowledge is itself thus marked by degrees of generality, and as they increase in generality, they exhibit increased unity and coherence. Now this unity and coherence which characterizes knowledge in its various degrees is exceedingly difficult to disrupt. As we examine it, it appears to be less and less like an artifice and more and more like a discovery. It is found out by inquiry. Moreover, we often speak of the organic unity of knowledge, meaning thereby, I suppose, that its parts are held together, not by some external binder, like the bricks in a house, but by an internal binder, like the parts of the body. Indeed, so strong is the unity and the coherence that, although with the grammarians we may analyze language into parts of speech, we do not succeed as logicians in so analyzing a proposition that its subject and predicate are wholly divorced. For logic the proposition itself is the unit. Yet a single proposition can not be wholly isolated from all other propositions, since to say that Socrates

is a man, for example, is to say also that he is whatever is implied thereby. Consequently the import or meaning of propositions, when logically worked out, carries us again, if only in what we call a formal way, to the recognition of the unity and coherence of knowledge. That is, logical analysis does not disrupt that unity, it discovers and exhibits it. Disregarding the concrete subject-matter of knowledge, it aims to set forth the system of implications in terms of which our thinking moves no matter what we may be thinking about. The realm of being as known is thus characterized by a certain unity and coherence. It is netted together in a system of implications such that one fact or event in it leads our thinking on to other facts and events. It possesses a logical structure.

It is the fact of this structure which leads us to call the realm of being the realm of mind also. We might have started with it and dispensed with all the discussion which has led up to it. The point of the discussion, however, may be repeated. We start out to explore the mind. At the outset we are confronted with the distinction between the mental and the physical, which is obvious enough, if we confine our explorations to what we do. If, however, we divorce the mental and the physi-

cal in any way which implies that the mental is in one world and the physical in another, we create for ourselves a problem which we can not state intelligibly and which, consequently, we can not solve. Any exploration of the mind is confined to the world in which thinking is itself a fact. Such a world is not a hypothetical or an assumed world. It is rather the world which is the immediate and concrete subject-matter of our inquiries. It is the world about which we think in all its vast extent and its bewildering variety. Our thinking penetrates it. If we assume within ourselves an agent mind which does the thinking for us, we either make that assumption ridiculous or are driven by it back again to the world from which we started. The exploration of the mind is thus an exploration of the world in which we think, but it has its own bias, so to speak. It is relevant to the fact of thinking, to the accumulation of knowledge, and would discover a mind if it could. What it discovers is the fact of logical connection interwoven with whatever we think about. That fact defines as a logical world the world in which thinking is an event. If such a world is properly the mind's world, then the mind is not properly a being, but a realm of being.

VIII

Whatever judgment may be passed on the discussion, whether it be condemned as trivial or acquitted as profound—and I must admit that much of it should be indulged in but rarely —the conclusion is, I believe, worth serious attention. It might have been stated in terms of experience instead of in terms of being, and thus have associated itself with prevailing philosophies of experience. We are in the habit of saying that in all our thoughts and reasonings we are confined within the limits of our own experience. In it our knowledge begins and ends, and to the test of it every bit of knowledge must finally be brought. It is impossible to dislocate ourselves from our natural position. We can not get out of experience and stand upon some commanding height from which we may then survey the world in which we live. Our point of view is determined by our situation. It is the world as experienced with which we have to do, and the world as experienced is the concrete, vivid world of every day. Now, if from the point of view of experience we ask what the mind is, we may answer that it is the subject of experience, the ego, the knower, the agent, the self. This answer has been repeatedly given by

philosophers, but, as repeatedly, other philosophers have shown that it is an answer which is not in terms of experience at all, but which merely gives expression to the belief that since there is experience, there must be a subject of it. They do not deny that there is a subject. They insist, however, that the only subject which can be found in experience is the concrete, living individual who moves about in his own experienced world. They have never been refuted. They force us to ask what the mind is *in* experience. Then we may answer that it is either a collective name for the experienced operations of thought or just another name for experience itself. If we take the latter answer, then the expressions, "the mind is in experience" and "experience is in the mind," are equivalent. If, however, we are not content with such nominalism, we may point to the fact that our thinking is motivated, controlled, and tested *by* experience, that one fact or event in experience implies other facts and events and is implied by them, that, in short, there is a system of logical connections in experience which we do not invent, but which we discover by long searching. So we use the term mind to denote the fact that while experience is a matter of space and time, of objects, qualities and relations, it is also a matter of

implications and inferences. There is a logical structure in it. The realm of experience is a realm of mind.

This is what I have been saying. I have, however, studiously avoided the term experience because it has come to imply that the world of experience is one world set over against and discontinuous with another world which is not the world of experience; that the former is something which somehow experiences or knows the latter, without, however, being in any way *the* latter; that the realm of mind is not the realm of being, but something which knows the realm of being without participating in it. Such implications I wish wholly to avoid. If experience is taken in a naïve and unsophisticated way, without recognizing on our part any obligation to speculate about its origin, its nature, its validity, or its relation to what is not experience, then all I have said amounts to saying that the realm of experience is the realm of mind, and this realm is a realm of being. But in affirming that it is *a* realm of being, I do not imply that it is cut off from or set over against the realm of being generally. The one is in the other. For my part, I take this to be an ultimate metaphysical fact in no need of any explanation whatever.

II

OBJECTIVE MIND

I

The preceding chapter was mainly an exploration. Its subject-matter was not so much the mind itself as the attempt to discover the mind. Its aim was to see where this attempt might lead and into what sort of a discovery it eventuates. If mind were an isolable object, if philosophers were confronted with it as chemists are confronted with the substances they analyze, there might be controversy over its composition, but there could hardly be controversy over its existence. We should not then have to search for it, perplexed about precisely what we are searching for and wondering whether we shall really find it in the end. That perplexity and that wonder, rather than the mind itself, confront us when we turn to the writings of philosophers. Many, like Descartes, have confidently affirmed that we are better acquainted with the mind than with

anything else, our bodies even, and that this intimate acquaintance needs no other illumination than its own. Others, like Hume, have affirmed with equal confidence that we are better acquainted with other things, that the mind eludes observation and escapes inquiry. Such opposite affirmations admit no ready estimate. We can not choose between them with ease, because the choice seems to imply that we ourselves already know what it is we know so well and what it is of which we are so profoundly ignorant. What would the mind be if it were discovered? If that question were acceptably answered first, it would apparently be easy to decide between Descartes and Hume.

But it is not acceptably answered first. There is the difficulty. Mind may be defined arbitrarily in ways which make its discovery either inevitable or impossible. Although the dispute involved may be clarified by such definitions, it is rarely settled by them. For mind, with philosophers, is not unlike what ether or gravitation is with physicists, a mixture of fact and hypothesis, not something palpably there and unequivocal. It seems to be an implication of existence rather than an existence itself. It is something demanded by considerations which seem to lead to it and make it necessary. By following these considerations

it may be discovered. At least there may be discovered what it is that creates the demand. Now such a following of considerations has been here attempted. Instead of starting with an arbitrary definition of mind, we have preferred to pursue what might be called the quest of mind, recognizing that, whatever the mind might turn out to be, the quest of it has followed fairly well-established lines. We have found the quest originating in efforts to construe our thinking about the world in which we live. For that purpose mind is invoked and for that purpose it is sought. We may accordingly ask what has been discovered in this quest and summarize the results in terms of the preceding chapter.

The discoveries may be enumerated. (1) The difference between such acts as thinking and walking is so radical, that we are accustomed to name the former mental and the latter physical, and to call ourselves minds in so far as we think. Thinkers are thus minds. This discovery is, admittedly, not profound, but it may be useful. For any attempt to invalidate it involves a dispute about names only, and it is clear that much confusion could be avoided, if writers who insist that mind is no more than a name for a being that thinks, would abide by this restriction of the term.

We should be spared many an unprofitable discussion.

(2) Given ourselves as thinkers, we discover nothing besides our bodies which does the thinking. In other words, if we ask what is the agent of thinking, the answer to our question is the same as when we ask what is the agent of walking. No matter how diverse our activities may be, the one identifiable agent of them all is the same, namely our bodily selves. This discovery is repugnant to many for many reasons which may be both natural and moral. But it is not well to reject it. The supposition of another agent of thinking besides the body ends in confusion whenever we seriously try to render it intelligible. We may believe that such an agent exists and fortify our belief with commendable arguments, but it remains something in which we believe. It is not something which we can identify nor anything which has value in metaphysical analysis. For such analysis, the thinker is, and remains, the body.

(3) If we turn to explore what we think about and let thought be led on by its objects, then we discover that thinking is coextensive with its subject-matter. It is a bodily activity and depends on the body for its vigor and sustaining, but it comprehends the body and very

much more. It has many limitations readily traceable to the body, but it has also a limitation not so traceable at all. We may think about anything in heaven or earth. We may think foolishly, insanely and incorrectly. If, however, our thinking is to be wise and sane and correct, it is not the body which makes it so, but a genuine coherence among the things we think about. This is not something we create. It is something we discover. We discover, that is, that there is in the realm of being a structure by virtue of which one fact or event in it may lead our thinking on to other facts and events which are involved, and opens to us the reaches of time and space and what they contain. This structure can not properly be described as physical. It is logical. Accordingly, if mind means anything else than a thinker, we have taken it to mean the logical structure of the realm of being which we explore when we think. In this sense the mind is not *a* being or *an* agent or *an* existence. It is rather the implication of all beings, agents and existences, revealing something basic about the realm of being itself. Whether such a use of the term is compulsory, is not a matter of major consequence. It is sufficient that it has metaphysical usage to support it. That existence, among its general characters,

has the character of logical sequence, is the prime motive that has led metaphysicians to affirm that the realm of being is also a realm of mind. Mind as logical structure is discoverable. There is a coherence in things which is found out by thinking. This coherence is something quite different from spatial juxtaposition, temporal succession or mass accumulation. It is that which responds to the search for reasons. It is that which language tries ultimately to express. On mind in this last sense I now wish to dwell.

II

Evidently this is not the mind with which the psychologist deals. His interest is in mind in the first sense, in the natural history and activities of thinking beings. In terms which are becoming steadily more current and acceptable, he is interested in a specific type of human or animal behavior which concretely exhibits itself in ways that are identifiable and which are subject to experimentation. What he does can be repeated by others after the fashion of science. His results call first and last for verification, no matter what metaphysical interpretation may be put upon them or what metaphysical implications his subject-

matter and procedure may involve. These he may properly and profitably disregard when he is busy with his own inquiries, even if his interest in them is profound and his estimate of their importance high. His is a matter of fact science, to be justified by its fruits and not by philosophers, either himself or others. To think, to perceive, to learn, to remember, to imagine, to hope, to fear, to love, to hate—all these and such as these are modes in which we human beings behave. To examine them in their actual operation is possible and highly profitable without considering more than their actual operations. That there is more to consider, the whole of philosophy is proof, but the whole of philosophy may decently keep silent unless it has something to say on its own account. Accordingly there seems to be no valid objection to the claim of many present-day psychologists that their subject-matter is a specific type of behavior and not that elusive thing called consciousness or mind in any metaphysical sense. The valid objection seems to be to any other claim. No; we are not concerned with the mind of psychology. We take it for granted, and, we hope, without illusions. We take for granted the fact that we live in a world of surrounding objects and in that world behave thoughtfully, imaginatively and passionately in ways that can be objectively ex-

amined. Only we would ask what behaving in it thoughtfully implies about its constitution and make-up, just as we might ask what walking in it similarly implies.

It implies that mind as logical structure is objective. By affirming its objectivity we mean that it has to do with the make-up of the world in which we think. As was said above, it is not something which we create, but something which we discover. It is of the essence of things, if such an expression may be allowed to lend emphasis to a profession of its metaphysical status. Such a profession was once well-nigh axiomatic in metaphysics. That being is logically constructed and constitutes in some measure a realm of intelligibility—a *mundus intellegibilis*—quite irrespective of our efforts to comprehend it, has been affirmed again and again with a confidence that looked upon any attempt to doubt it as either trivial or monstrous. And it must be admitted, I think, that the confidence is natural. This is no conclusive proof that it is sound. Yet it is an impressive fact that so much in human literature and in the language of science and philosophy witnesses to the objectivity of mind. The quest of experiment is for causes, but the quest of thought is for reasons. It is not easy to take this distinction as a piece of happy rhetoric. It cuts too deep.

Belief in objective mind is natural. Men naturally believe that there is reason in things, not necessarily reason in the sense of discursive thought, as if the dear old world were thinking hard, but a reason that somehow accounts for things and renders their operations intelligible. They do operate. We may find out the means and method of their operations, but the rationale of it, the sense of it—that seems to be a different matter. Nature forces us to put to her the insistent question "Why" and we tend confidently to believe that she will ultimately answer "Because." The expressions of this belief in human history and the consequences of it are too multifarious to admit here any exhaustive enumeration. They run the whole gamut from animism to science and back again. It has been and still is one of the hardest things in the world to convince most men that the reason why they are here to seek knowledge, to suffer and enjoy, to live and die, is to be found simply in a record of their natural history or in an idiosyncrasy of nature or of their own constitutions. They want a reason more profound and more congenial. If such they can not discover, such they may invent in terms flattering or consoling to their experiences, clinging to the absurd and the impossible—and these are logical ad-

jectives—as something better than no reason at all. Men believe in God or in providence not because there are ample proofs of their existence, but because it seems so unbelievable that our fate has no significance beyond ourselves or forms no part of a wider plan that might explain it. And men believe in the uniformity of nature, not because there is ample proof of its existence, but because it seems so unbelievable that any event should occur in isolation. Tucked away in most of us, in spite of resolute professions of intellectual emancipation from all the foibles and weaknesses of mankind, is the solid conviction that in the nature of things there is something, no matter whether it is ever found or not, which, if found, would render intelligible to us this sorry scheme of things entire. It seems preposterous to profess that the world is utterly without rhyme or reason in itself, that it is devoid of significance and intelligibility, while yet we thoughtfully seek to discover in it a way of life which can be justified as intelligent and rational. A profession like that has the marks of irrationality about it. It is like insisting jointly on an obligation and its futility. If knowledge is really power and if understanding the world is really the key to its enjoyment and mastery, it would seem as if

knowledge must have a leverage in things. Belief in objective mind is natural.

The likelihood is that it is also sound. In spite of the variety and vagary of its expressions, and in spite of the colorful illustrations of it just given, we may profitably consider it dispassionately. For it may well be that difficulty resides more in the expressions than in the grounds of it. The bare fact that it is a wellspring of so much that is shallow, so much that is sublime, is at least a challenge to metaphysical inquiry. In the face of it, we can afford, temporarily at least, to be a little suspicious of other beliefs which may run counter to it. These we have. It is true of many of us that other beliefs have so shaped our habits of thought that belief in objective mind, although natural, is uneasy. For modern metaphysics has been so obsessed by the categories of physical science that these have usurped the claim to supreme and exclusive attention. Since the days of Locke and Newton, space, time and matter have bulked so large in all our thoughts and reasonings, that they have tended to become the only categories worthy of ultimate respect. The consequences for metaphysics have not been fortunate. One could show from its history how readily it often became a romantic substitute for science

or else the desperate attempt of logicians to invent an evolution or deduction of the categories by the sheer operations of thought. In neither case did it deserve serious consideration.

It is wise to forget it or to remember that it is not likely that the soundness of belief in objective mind rests on the fashions of philosophers. Space, time and matter may have little to do with it. It is not necessary, however, to impugn their validity or convert them into logical concepts. It is too obvious that the material world is a fact. It will go on in its own natural way which, happily, we may discover, but which, fortunately, is not dependent on any peculiar logic of our own. It is also obvious that space, time and matter are neither the only nor exclusive categories. They may make up a world of speeding bodies, but they do not make up an intelligible world. The supposition that they can be made to do this, is the thing that makes metaphysics look like insanity or a wordy battle between materialists and idealists. Space, time and matter may be allowed their full reality. Divorced, however, from the interplay of thought with them, they can neither recover thought on their own account nor be recovered by it. This is sober truth. It needs no other proof than the

attempt to do what is here claimed to be impossible. If other proof is asked for, let the writings of those who think they can do it be read. When thinking is not accepted as an actual participation in existence, but as something essentially supernatural—either as the subjective accompaniment of a brain or as the generator of its own categories—it is not likely that absurdity and illusion will be avoided. As against this, it is worth insisting again that our thinking in the world can hardly be less relevant to its constitution than our walking in it. By our efforts existence becomes better known and better understood. It may be that, by forgetting distractions and by remembering how knowledge is naturally effected, belief in objective mind may appear as warranted an implication of the facts as any other implication of them.

III

An examination of knowledge is apt to wear a strained and troubled look. So long as we are content to be psychological and confine our attention to those identifiable processes which occur when we know, we are not sensible of any peculiar difficulty. We know what we are about and expect an account of what we have

done to be intelligible. Similarly, so long as we are content to be formally logical and confine our attention to such matters as classification, definition and consistency, we also know what we are about and expect a common understanding of what we do. But when we take either psychology or formal logic as an exposition of what knowledge is rather than particular illustrations of it like physics or chemistry, we may become acutely sensible that we have done a strange thing. Knowledge of one set of facts can hardly be taken as an account of what knowledge of any set of facts essentially is. It helps us not to claim that the facts of psychology and formal logic are more intimately associated with the process of knowing than are any other facts, for this is not true. Without other facts there could be neither psychology nor logic. The "knowledge of knowledges" or the "science of sciences" may please us as pretty phrases, but we can not discreetly claim for them a higher value. The piling of one act of knowledge on another leaves knowledge precisely where it was in the beginning with no super-science as the result. This it is that makes examinations of knowledge so often wear that strained and troubled look. What is so often called epistemology is not legitimate.

And yet we are said to know. Robbed of the truth of that saying, the whole enterprise of learning crumbles. Knowledge is a fact of existence as much as any other. Shall we then confess that it escapes inquiry and refuses to be examined? An affirmative answer is implied by the preceding paragraph. There is no intention here to overlook the implication. The intention rather is to insist upon it and to insist upon it at the risk of appearing to overlook it. What happens when knowledge happens is not the appearance of the act of knowing to be examined, but the appearance of something else to be known. This peculiarity of the event is universal. There is no exception to it which gives us the act itself to examine. Man thinks, is an axiom. It governs and controls every attempt he makes to construe what his thinking is. That seems to be all the science of knowledge to which we are entitled. In what follows, I hope this fact will not be forgotten even if I appear to have forgotten it myself. It is an exhibition of the fact that I am aiming at, a driving of it home by considerations which seem to me to be pertinent and legitimate. I would have the act of knowing appreciated for precisely what it is, or, more modestly, for what it seems to me to be. If anyone wants to insist that such

an appreciation is an examination of knowing or even knowledge itself and so convict me of or free me from a formal inconsistency, I will not object except to affirm that I do not follow him. To try to tell what knowledge is, seems to me to be something different than creating a science of it.

What, then, is knowledge? What is it that we may properly be said to know? Is seeing a color, knowing color, or hearing a sound, knowing sound? Is the bare fact of that diversified subject-matter which is the object of all thoughtful inquiry, knowledge in any sense of anything? If it were, it would clearly be difficult to understand why its bare existence is not an adequate substitute for science. To stare the world in the face, so to speak, is not to know it. Walking is not the science of mechanics, nor digesting the science of chemistry, nor thinking the science of logic. Knowing things is not being them, nor is their existence knowledge of them. As Santayana somewhere aptly says: "Knowledge is not eating, and we can not be expected to devour what we mean." Nor can knowledge be exhibited as the conscious counterpart or resemblance of existence. There is an honored doctrine, which for our purposes just now may be left uncriticized, that in our consciousness exist-

ence or parts of it is somehow counterfeited, so that we internally possess some similacrum of the greater outer world. As James once put it: "Our images of things assume a time- and space-arrangement which resembles the time- and space-arrangements outside." Even if we admit this, it is quite clear that knowledge has not yet been reached. Possession of a counterfeit of reality is no nearer to knowledge than the possession of reality itself, and we can, with only the shadow of dialectic, ask whether we know the counterfeit, that it is a counterfeit, and how we know all this. The counterfeit may resemble its original and be comparable with it point for point and we may be conscious of this resemblance, but even then knowledge may still be far away, for without taking over the burden of this perplexing doctrine, each of us knows well enough that the consciousness of the resemblance of a photograph to its original is knowledge neither of the one nor the other. At best it is knowledge of the resemblance between them. Shall we then say that it is such because we are conscious of a counterfeit of resemblance? Then the shadow of dialectic turns into its substance and we may debate forever without acquiring any other knowledge than that of skill in controversy.

Indeed, it seems almost incredible and would be wholly so did we disregard historical motivations, that philosophers should ever debate with so much heat the rival claims of presentative and representative theories of knowledge. The littlest piece of knowledge they possess refutes them. Tear away any veil of consciousness supposed to hang between us and the things we know and knowledge is not thereby brought into being. Or stretch it tight, make it opaque, paint on it a picture of that it screens us from and then add on what we will, we have not even then exhibited knowledge. We have exhibited only an opportunity for it. Consciousness may hang a veil between us and things. I do not believe it, but it may. Consciousness may not exist. I could believe that were it not for some who affirm it. But what has my belief, or anybody's, on this disputed matter to do with the fact of knowledge? It may be insisted that consciousness must first exist before there can be knowledge. Let that be heartily granted no matter what it means. We have, nevertheless, to insist with equal energy that the body must first exist and the world too. We do not reach knowledge simply by multiplying existences.

It has been the contention of metaphysics since ancient days that knowledge is a matter

of ideas. To know a thing is to have an idea of it. In this respect metaphysics keeps close to the conviction of common man. He will hold an object in his hand, look at it, listen to it, taste it, smell it, rack his brains about it and be intimately conscious of it, and yet tell you that he has not the dimmest idea of what it is. And you believe him. All presentative and representative theories of knowledge are damned by this experiment. We are driven to other considerations. For it is perfectly obvious that the missing idea, whatever it may be, is not the object's presence nor a representation of it absent from the man's mind or consciousness. There is no doubt that he may come into possession of the idea, acquire it, as we say, by experience—a fact which leads us confidently to affirm that all our ideas are so acquired. But it seems quite clear, without any elaborate analysis, that the experience which ends in the acquisition of ideas is not an experience which ends in the presentation of the object or in any copy or representation of it. Such an experience as the latter has happened and the idea is not there. We may accordingly conclude that, given all the experience we have or can have, an idea—unless we arbitrarily make it such by a definition to start with—is never a copy, image, likeness,

resemblance, counterfeit, presentation or representation of anything whatever. Likenesses are things like photographs, paintings, drawings, models. They are expressed in lineaments comparable with the things they are like. Ideas are not so expressed. They are expressed, when we speak or write, in propositions. And a proposition is never, in any sense, like the thing it propounds. Its effect is not photographic but communicative. It conveys ideas and effects knowledge. Ideas, therefore, can be conveyed. They are communicable. They can pass from one man to another, from one mind to another. And this clearly is something which no consciousness whatever can do.

Ideas are expressed in propositions. They deliver their subject-matter in affirmations and denials. They can be expressed in words and printed in a book to be read and understood. Mindful as I must be of the many controversies in which we philosophers engage, this fact must give me pause. It is so simple. Yet when it is elevated into that rare atmosphere which we philosophers so often breathe and then say nothing at all, it impresses me as the most astounding fact there is. To live and die in this perplexing world and yet to keep from the cradle to the grave this childlike faith that we islanded and isolated souls have only to

speak and to win thereby a common earth, a common heaven and a common understanding, is a miracle, if ever there was one. To cram the system of the world between the covers of a book—but metaphysicians should avoid rhapsody. The fact that could make a poet soar is as simple as having his poems read. Ideas are expressed in propositions. They are not only so expressed. They are expressed in gestures, as when deaf-mutes communicate, when gestures themselves express what it is *to* express, and no sound breaks that silence to stir thought by the spoken word. They are expressed in the tension of the eyes, in the tell-tale look of the face, in the knitting of the brows, in strains in the head and in what we call nervous processes in the brain. The variety of the forms of their expression and communication is innumerable. Even an impulse from a vernal wood can teach. The heavens are telling. The whole vast scheme of things seems to be engaged in expressing what it is.

Ideas are acquired. The technique by which this is done may be left here unconsidered, for it involves an inquiry into the body's mechanism. It is sufficient to know that we acquire them through contacts. We lay hold of objects, photographing them with our eyes and

resonating them with our ears—the operations of our sense organs are measurably reproducible through the contrivances of art—and one of the consequences is ideas. We are not, however, concerned with the mechanism, but with the consequence. Yet it is important to remember that ideas are something we come by and that we get them through bodily operations. This is ample proof that we are organically adapted to that end, that they are not created out of nothing. It is also ample proof that we do not bring them ready-made to bear upon objects nor add them to things without permission. They arise, as was said, through contacts, much as a match strikes fire through friction and illumines what was dark before. They are a revelation of the world, telling us what it is in consequence of our contacts with the world. We may, therefore, claim that we derive them from experience. But experience is then our active participation with the rest of things. It involves what has already been said about expression and communication, for, without this, there either are no ideas or they do not operate. The bottom fact in this matter after all is not that there is a body or that there is a world or that world and body interact. It is rather that through this interaction there are ideas and that they are expressed and that they are communicated.

It is an impressive fact that they are communicated and expressed in so many different ways. It is a still more impressive fact that they are wholly indifferent to any specific mode of conveyance. They may travel by all the paths there are in this expressive world. This fact proves conclusively that the mode of expression, although it carries an idea from one thinker to another, is not itself an idea at all. I tell my neighbor in spoken words that matter is indestructible. The deaf-mute tells his the same truth in gestures. But what conceivable likeness is there between the truth conveyed and the means of conveying it? What it is for matter to be indestructible, is like neither spoken words nor agile fingers. Neither, we may add, is it like anything that happens in the brain or in consciousness. It is strictly *like* nothing at all. We face again the fact that ideas are in no sense likenesses of anything. They are rather that which can be translated from one mode of expression into another radically different mode and from one language into another without losing themselves or ceasing to be what they are. This is something rarely noted by epistemologists. They are so busy trying to find some comparison between ideas and things, or making some theory to explain how the mental can know the physi-

cal, that they overlook the simple fact that ideas are wholly indifferent to what expresses them and yet do their work. Instead of asking how an idea can be like a thing, they might more profitably consider how so many different things convey the same idea. Metaphysics and common man seem to be right. Knowledge is a matter of ideas. And the problem of knowledge, so far as there is a serious one, is the very practical problem of getting ideas, of making them clear, and of keeping them from getting in one another's way. There is no problem of their agreement with their objects unless by agreement we mean their effectiveness in making clear what their objects are.

IV

Now the method by which ideas are made clear and their effectiveness in discourse promoted so that knowledge increases in extent, validity and power, is translation. We would keep the metaphor in that word and take it seriously. The change of electricity into light we would have no more and no less a translation than the change of *homo* into man. As a preliminary justification of this we would cite the change, through a piece of machinery, of

scratches on a rubber disk into a song and the change, through the machinery of a man's brain, of nervous processes into *homo*. To be sure, a phonograph is not a man, even when it sings. Its mechanism is not his, and he, we say, is conscious while it is not. Both are mechanisms none the less. Both may get out of order and so neither sing nor be conscious. And nobody has ever found, either in a phonograph or a man, anything besides being in order or being out of it, which accounts for the singing of the one or the consciousness of the other. In a matter like this, a metaphysician dare not hope to succeed where others have failed. He has to take their word for it and also his own. He may become despised for a materialist, but his defense would be, that if his vocal chords were in better order, he would sing better than the phonograph. But in a matter like this, a metaphysician may dare to drive home the fact he so readily admits. Equating phonographs and men as machines is really an equation of them. And it is serious. Instead of being the trivial, disgusting and soul-damning thing which some say it is, and instead of being the complaisant or resolute emancipation from the spiritual troubles of mankind, which some hope it is, it makes both man and phonograph vehicles of transla-

tion. Who then will say that what is translated through a man is less cosmic than what is translated through a phonograph? Not this metaphysician. So the metaphor in translation is to be kept. It is to be kept and developed, with some repetition unfortunately of what has been said. It is hoped, however, that the repetition may be worth while.

Getting knowledge, we repeat, is not getting existence at first hand or at second hand. It is getting ideas. And ideas are not *like* anything at all, even when they are specific and individualized. The idea of a circle is not like a circle for it has neither center nor circumference. It can not be drawn on a piece of paper, nor presented as an image in the imagination. We get it from circles, from contact with them, from experience. A child gets it, glimmeringly, obscurely, but naturally, from the first circle it looks at attentively. It need never look at another, even to become a Euclid. But people like Euclid humbly admit that they have not yet exhausted the idea of the circle in spite of the millions of circles they have looked at and drawn on paper and imagined. All this, in the history of philosophy, is as old as Plato. In the history of man, it is as old as Adam. It is recorded that he had to tell what the animals are. Probably only lack of

space or the failure to appreciate the demands of future generations prevented the historian from recounting the achievements of the first man in other fields. Anthropologists have been busy at it ever since. They know what a time man has had with ideas. Philosophers and psychologists have been busy with it too. They have had a time with ideas, making reputations thereby and also sending men to the madhouse and the stake. All this is familiar to historians and all this is a consequence of such primitive experiences as getting the idea of a circle from circles and finding that the idea is neither a circle nor like one. There is a controversy over universals which nobody has ever settled.

It is not the intention here to settle it. The glory that would come from doing so could not be endured by mortal man. We may stick to the facts, letting those who will try to scale Olympus, and ironically profiting by their experience. The facts are these: we get ideas from experience through contact with things; and ideas are not like things. And the controversy, especially when men have bled and died for it, has clearly shown that, in this wicked world, it is far more important to have clear, distinct, true and adequate ideas, than it is to have many things in our pockets, or the

egotistical glory of having settled the controversy in our minds. It is probably more important in heaven too, for we are told that there is joy there over one repentant sinner. Clear, distinct, true and adequate—there is the challenge of ideas. And that challenge, every one of us, from children to metaphysicians, meets in a simple, obvious, natural, practical and definite way. There is no more mystery about it than there is about anything else. The mystery is that it is so seldom thankfully accepted in its simplicity and the metaphysical implications of it embraced with joy.

We try to have ideas possess those precious adjectives we would have them own, by translating—by expressing them and communicating them in every possible way they can be expressed and communicated. I would gladly, under Plato's spell, say that we do this by "dialectic," only I fear that the reader will not translate that Greek word by "conversation." We "thoroughly say" in every conceivable manner. We converse either with ourselves or with others. Our own internal reflection is no less a conversation than our spoken and written discourse, even if the language used is different. As speaking has its own proper medium of sound, and writing of characters, so thinking has its own proper medium.

Psychologists convince us of this by abundant evidence, and functional and nervous diseases warn us how easily the thread of our internal conversation may be snapped. Although ideas, as has been said, are indifferent to any specific vehicle of conveyance, they are never without a vehicle of some sort. They have to be carried. From this fact it would seem naturally to follow that if they are too heavy when carried one way, they had better be carried in another. They are made clear, distinct, true and adequate by passing through repeated and varied expression. We draw on all available means—words, symbols, pictures, diagrams, formulas, models, gestures, postures, feelings and those qualitatively diversified contacts with things that we call sensations. By going through these varied modes of expression—by being "said through" them—ideas gain steadily in clearness without ever owning identification with any one of them. In short, ideas are made clear by translating—from one set of words into another set, from one language into another language, from one gesture into another gesture, from one brain process into another brain process, from one bodily condition into another bodily condition—and they are never made clear in any other way. They are never made clear by getting them

purely by themselves, alone in their clearness, distinctness, truth and adequacy. Trying to get them that way leads to the madhouse.

It may be well to follow their method a little way in detail. We may climb the Tree of Porphyry, piously using that ancient device to make clear the idea of what Socrates is. He has done noble service in philosophy besides proving our mortality. What, then, is Socrates? A man. What is man? A rational animal. What is an animal? A sensible living being. What is a living being? An animate body. What is body? A corporeal being. What is being? Being *is* being! Are we, then, carried to the indefinable or to a tautology and thus defeated? Is our effort to tell in words what Socrates is, ineffective? That has been affirmed. Yet the affirmation does not put an end to the writing of books or make new editions of the dictionary unnecessary. We claim to define in words what things and ideas are, and we proclaim in words that words are neither the things nor ideas defined. Climbing the Tree of Porphyry offers us no escape. It shows us, however, one way we climb. We go from words to words. If one word is not clear, we use other words to make it clearer, and go on and on until words fail us. Verbal discourse is verbal discourse from beginning to

end. Yet it produces clearness of ideas and understanding of things. It does this by translating some words into other words and by putting a new word in place of an old one. And by this same process we express in words what words are and explain how it happens that words perform their useful service. By this same process we would tell the world what the world is. So powerful are words to clarify ideas and make them public property!

This which is true of words is true of every other mode of communication. When deaf-mutes converse, they go from gesture to gesture, defining one gesture in terms of another and clarifying their ideas by moving their fingers. They have their own Tree of Porphyry to climb. We may teach them to read the printed books of them that speak and imagine that we have then given them the gift of voice. We have, however, only assisted them in acquiring a more refined type of gesture. We have taught them to economize gesticulation much as we have learned to economize verbal language through the use of general and abstract terms. But their medium of communication is what the speaking call visible signs, but for them something which can not be *called* visible at all. We can understand them and they us, and we can both read,

as we say, the same books, so that it is easy both for us and for them to forget that in this matter of translation we are more radically removed from them than we are from those who speak a foreign tongue. We might make them blind so that they could read only with their fingers, and yet the miracle could still go on. So indifferent are ideas to the organs of sense. Gifted beyond deaf-mutes as we speakers pride ourselves in being, and proud as we are to be able to help them to an understanding of the world more quickly than they might reach it by their own unaided powers, we seem forced to believe that their mastery of communication could reach the full extent of our own even if they acquired it in what we call a silent world. They can convey the idea that they are hungry and they can convey the idea that matter is indestructible. This witnesses, no doubt, to their powers of abstract thought, and it witnesses, with no less doubt, to the fact that what-it-is-for-matter-to-be-indestructible—and that, I imagine is as near as we can come to putting the idea into words —is neither word nor gesture, nor any mode of communication whatever. Yet without some mode of communication, some translation somewhere, it would never clarify a noisy or a silent world.

Competent as the language of words or gestures may be, each of them is crude when compared with that more refined language which carries on our internal conversation with ourselves. Thought is quick. We borrow images to say so, and speak of the wings of meditation, flashes of insight, leaps of imagination. Often one can not speak fast enough or write fast enough to put one's thoughts into sounds or characters. But thought may be also slow. Figures of speech again express how halting, heavy and labored it may be. Our vocabulary, when dealing with thought, is worth attention. Perception, conception, understanding, reason, discourse, inference, imagination, insight, intuition, intelligence, comprehension—such nouns show how readily the description of thought runs to metaphor. Adjectives are equally instructive—clear, distinct, adequate, penetrating, acute, sharp, bright, dull, ponderous, deep, subtle, brilliant, pure, correct, logical, true. If thought is spiritual, can we do no better than borrow terms from a material world to describe it? And, for that matter, spirit is breath. Ordinarily we pay little attention to all this and are apt to be irritated when asked to take it seriously. But that is what is here asked. Doubtless it is easier, neglecting such niceties as are here implied, to talk right on

and let the winged words fly. But it is because they literally do fly that it seems worth while to pay attention, to stretch towards them. It is because thought literally has foundations, as material as any house, that we should be interested in what stands under it. Our vocabulary of thought may not be metaphorical at all. It may be profoundly appropriate. Our internal conversation is carried. It has a vehicle. It has a language, even if it has neither tongue nor ear, and that language is as material as dull sounds, clear words or quick fingers.

This necessity of describing reflection (and I must parenthesize the *mirror* here) in language has often led to a dispute whether thought without language is possible. The dispute is usually settled when agreement is reached about language itself. The term smacks of the tongue, and that is probably why it may become violent. Most of us would probably admit that we think in words. It is not difficult to detect them, they tremble so on the verge of utterance. The apparatus of the ear, the throat and the eye is so intimately involved, that psychologists recognize distinct classes of thinkers, the audile, the motor and the visual. Even the superficial appearances of the body, like blushing, pallor and the frown,

are so bound up with thought and so tell-tale, that an evolutionist might argue that only those have survived who have gained competent mastery of their suppression, protected thus from a too public exhibition of what is going on within them. And it is not extravagant to suppose that with many, did they think with their mouths open, a sound amplifier might be invented which would put their inmost thoughts in the possession of all within reach of the amplified waves. But we need neither evolutionist nor invention to convince us that the privacy of our own souls is possible only because the body does exclude too public modes of expression. It suppresses them. This can actually be detected in the muscles of the face, arms and hands, the movements of the eyes, strains in the head, the circulation of the blood, respiration and even the poise of the body. So if we mean by language words only, there can be thought without it. Deaf-mutes confirm this, as do animals. But if we let the term language cover forms of communication, then where there is no language, there is no thought.

The full evidence of this may be sought elsewhere, principally in the work of psychologists. There are well-recognized aphasias and amnesias which prove the connection between

thinking and internal media of communication. There is an internal language. And the difference between this and other languages is, at bottom, the same sort of difference. This ought to be insisted upon repeatedly. Philosophers have done much to obscure it by insisting—nobly, no doubt, in the interests of a good life—that there is in a man's body something besides his body and that this something frees thought from contact with material things. The evidence is to the contrary. We may call the instrumentation of thought by what names we will, consciousness or states of consciousness or mental processes. When we get it down to something we can identify, describe and experiment upon, we find it dropping into the one common subject-matter of all description and experimentation, into material, whether that material exists as electrical and quantitative or as red and qualitative. The language of thought is a material language. If, by its operation, ideas gain in clearness and we win understanding of the world, it is because translation goes on. One bodily process goes into another as one word into another. There is here too a Tree of Porphyry.

We have not yet done with translation. There are many languages; as many, in fact, as there are modes of conveyance. It would

seem as if the only condition which these modes have to fulfill is that there is some sort of passage between their elements, some sort of exchange of one of them for another. In mimicry of algebra, we might say that x and y may constitute elements of a language, if y is a function of x. Then clearness and understanding are promoted the more the function is developed, even if it ends finally in something like Being *is* being. Let this be analogy only, yet it may serve to indicate that progress in clearness is a development of elements in relation to one another, and that any elements which can so develop, may operate as communication and produce a language. Now, of these many languages, translation goes on, not only within each by itself, but also from one to another. Greek may be translated into English, and both of these into the language of deaf-mutes. The Bible is an excellent example of translation. There is something imposing about its many editions in its many languages. Do all its many readers get the same message, the same idea? It is a popular belief that they do.

It is an obvious fact that they do not. In translating from one language into another, there is something lost and something gained. Each language has certain nuances of its own

which cling to its elements or structure and which do not admit of direct translation. If only dictionary and grammar are used, a modern novel may be so translated into ancient Greek that even a cultivated Athenian of Pericles's day would have but a poor understanding of it. Plato is, in Jowett's translation, scarcely what Plato was. Even if he is read in Greek, he is rightly understood only as we recover the living usage his words once had. If we would thoroughly say what deaf-mutes are saying, we must do our best to lose the gifts of speech and hearing. If we would see what the ever-blind see, we must do our best to appreciate what James once said, that we do not see out of the palms of our hands or the middle of our backs. Similarly and as emphatically, when we talk with the internal language of the brain, we must remember that there is something invisible, intangible and inaudible, like abstractions, which can not be transferred as just what they are into sight or touch or hearing. But these unescapable limitations of language do not prove that ideas are not actually conveyed. They prove only either that translation has not been carried as far as it might be, or that the full comprehension of an idea requires its expression in all the languages there are. If matter is really

indestructible, it must be so expressed all the way from an electric charge to the thought of a man. The absence of any one of these expressions leaves the idea proportionately lacking in clearness, distinctness, adequacy and truth. No one language can carry translation to the limit.

Yet there is, for us, one language which is crucial. This is the internal language of the body. This is that delicate network of communication within us which ages have been consumed in weaving. Whatever may be conveyed by the varied speech of men, by gestures and symbols, by pictures and hieroglyphics, by sights, sounds, tastes, smells and touches, by contacts and experience, by one thing following another, by y being a function of x—all this is interchangeable through the medium of that internal language. It has however, the limitations which they have. Its nuances are not theirs. To get these latter we must translate it back again, just as we must translate them into it if we are to get the nuances of reflection. Like them too it conveys ideas without becoming ideas, and is engaged in making ideas clear and promoting understanding. It is especially emphatic in affirming that no one language is adequate for adequate clearness of the idea of the indestructi

bility of matter or the idea of anything else. If philosophers were only convinced of all this, we might joyfully cease trying to be materialists, idealists, panpsychists and the like. We might gladly confess that we are linguists, wordy men who, caught by the fascination of language and the profession of its power to tell what things *are*, are led again and again to affirm that what things *are*, is what they are somehow and in some way *said to be*. Their existence is not their being, for their existence changes before our eyes and it is only through their changing that we come to have the slightest idea of what their being is. Were there no translation, Socrates could never *be* a man, nothing could ever *be* anything.

This wordy dialectic has been risked in the hope of establishing at least three convictions, first that language, which everybody says conveys ideas, is a material exchange and as such is on a par, metaphysically, with every other material exchange and they with it; secondly, that ideas, although they are conveyed by something material, are not the material which conveys them, but an effect wrought in the exchange, and so not material at all; and thirdly, that ideas, because they are acquired and clarified by experience, that is by the contacts of our bodies with the rest of the world,

and because they are conveyed from one person to another, are, in spite of their immateriality, not some peculiar idiosyncrasy in ourselves, but genuine discoveries and genuine constituents of the system of things, showing that that system is also a realm of being which can be investigated and rendered intelligible in discourse. In short, objective mind seems to be a necessary implication of the axiom, Man thinks. It seems incredible that he should think in a world which in itself is not logical, just as it seems incredible that he should walk in a world which in itself is not mechanical. If his thinking is relevant to the constitution of things, the constitution of things is relevant to his thinking. *Ordo et connectio idearum idem est ac ordo et connectio rerum.*

V

We are familiar enough with change and yet rarely cease to wonder at it. The farmer plants his seeds in the spring, and, as the season advances, seed, soil and sky are changed into a growing plant. This is the kind of world we live in. A child observes it and no metaphysician improves on the observation. He can do no more than express it most generally and be attentive to its implications. Scientists

may describe and experiment upon it, but they, like child and metaphysician, leave it precisely what it was in the beginning. They discover in detail the mechanism which anybody may observe in gross, and lead the farmer to say nitrogen instead of air. They thus win glory for themselves and render a splendid service to mankind, for men can make and run machines and make and run them better the more their details are discovered. But child or metaphysician or scientist does not change the constitution of things. That stays put. It is this that makes the wonder of change rarely cease to be impressive—that a seed should grow into a plant of a specific kind and that nitrogen should be taken out of the air; that, in spite of change, there should be order and connection. To explain it, we call on God, nature, matter, chance, energy, material and vital force, soul, entelechy, mind, the unknowable, the unutterable. We debate their rival merits, stupidly forgetting that all these words are names for the order and connection of things, and that the-order-and-connection-of-things is also a name. Yet I suppose that nobody believes that they are names only. They name something besides a nonentity. But what? Whatever it is, it is clearly not something which can be located in a place or

given a date or weighed in the scales. It is not something *like* something else. It is, however, what we try to discover and try to express.

A metaphysician may name it appropriately to his own emphasis. Since he is led to it by considering thought, not as a psychological process which may be described, but as a logical process which may eventuate in knowledge, he is led to name it mind. He adds the adjective objective, because it is over against him and he over against it. It is a discovery and not a creation of his thinking. If he is wise—and it is as hard for him as for anybody else to be that—he will admit that he has explained nothing in a manner different from that in which children and scientists explain. Like them he explains by giving reasons. He can do no more. If he supposes that, by appealing to objective mind, he can make clearer than a chemist does, the change of oxygen and hydrogen into water, or clearer than a biologist does, the change of an egg into a chicken, he may expect to be applauded by some, but he will certainly be pitied or despised by others who are wiser than he. If, however, he steadfastly refuses to turn objective mind into a magician, he may affirm, after all, that "without being, nothing can be nor be conceived,"

and be believed. For being anything and being conceived as anything, is not, in the last analysis, an affair of space, time and matter. It is an affair of logic. The proof of this is the world-old dialectic that if Socrates and man are identical existences, then the proposition, "Socrates is man," means no more than that Socrates is Socrates or man is man; if they are different existences, then Socrates can not be man, because two different existences can not be the same existence; if they are two existences, alike in some respects and different in others, it helps us not, for Socrates was said *to be,* not *to be like* unto or different from, man. This is childish if employed to produce bewilderment or confusion, or to find a contradiction in every finite judgment. It is sublime in its indication that to be and be conceived is an affair of ideas.

What, then, are ideas? We may now say that an idea is an object in its logical connections. It is in no sense image, copy, likeness; in no sense one kind of existence set over against another kind, demanding comparison between the two in order that there may be knowledge. Nor is it the object's presence, not even if we describe that presence as a presentation to or in consciousness. For we may see objects and yet have little or no idea

of what they are. We may handle them and still be ignorant of them. To have knowledge, something more and something quite different is necessary. Objects must effect a specific kind of leading on. They must evoke affirmations and denials. They must generate propositions. And our contention is that they do this, not by being first transformed into something like them or into something which implies them, but by being themselves already involved in a net of logical connections which we follow out and discover. The idea of anything is what that thing *is*. What a thing is, is conveyed by language, by a material exchange, and is wholly indifferent to the particular material exchange which may convey it; and no one exchange conveys it more truly than another. In terms of the realm of mind, ideas are its logic particularized and focused in objects.

Objective mind is thus a system of ideas. It is not, however, a system which is parallel with the physical or interacts with it. Nor is it identical with the physical, or, with the physical, an aspect of something still more fundamental. It were better to say that it is a system of the physical, that system in terms of which things may become propositions, be reduced to formulas and admit affirmations

and denials. Knowledge finds in it its objective ground and the possibility of its verification. No wonder men so naturally believe that there is reason in things. No wonder they have given to this belief expressions which vary from the ridiculous to the profound. No wonder that philosophers have so often insisted that the last word in metaphysics is mind. Curious indeed would be the outcome of philosophy if the attempt to think through our thinking about the world we live in, should have no other outcome than the affirmation that the world is utterly devoid of mind in its own right and that all we mean by mind is some strange idiosyncrasy of human nature which finds no kinship beyond itself and yet assures us that knowledge is power.

III

MANY MINDS

I

Many men, many minds—the expression brings before the metaphysician the subject-matter with which he has to deal when there is consideration of mind in the plural. Not that he would deny the mental gift to other creatures besides men, but seeing in them its undoubted expression and most brilliant illustration, he may there the more readily explore it. Indeed, it might well be claimed that it is with many men or with oneself that an analysis of mind ought properly to begin, for that structure which we have called objective mind is not comparable with you and me. It lacks that peculiar intimacy and sense of possession which we ascribe to our own minds and which tempts us to think that we know them so well, even better than anything else. It is something we arrive at through reflection, not something we begin with through observation. And

having arrived at it, we find it to be something unique and no original or pattern of ourselves. Objective mind may be august, but it is not a human mind. It thinks not nor remembers. It perceives neither itself nor its world. It is a stranger to perplexity, doubt and error, and a stranger equally to philosophy and science. It has no need to take thought to find its way about in an ambiguous world. Personality and also deliberate authorship of the universe are often, and naturally, imputed to it, because, being in a logical sense the essence of things and the ground of their intelligibility, it would seem that the bare fact of it must be productive and consciously so, or at least that, like the Prime Mover in Aristotle's philosophy, it quickened in things a consciousness of their limitations and a desire for their perfection. Such imputations are not carelessly to be denied. They have meant much. It must be admitted, however, that, elevating as they are and congenial as they are to human aspiration, they do not afford the slightest clew to a method by which we can pass directly or indirectly from the one mind to the many. If we start with it, we find ourselves unable to invent any deduction which will draw out from it the many human minds which try to meet.

Moreover, objective mind and many minds

are both called mind not because of any similarity of existence between them. They are not like different individuals of a common class. They own a common name because it is appropriate in view of thought's activity. This implies, on the one hand, an agent that thinks, and, on the other, the limiting conditions of the logic that restrains him. Speech is full of such appropriate uses of names in common which involve no consideration of individuals and classes. A man walks; his walking is a walk, and such, too, is the path he takes. We thus keep together considerations which are relevant to an emphasis without forming a class of individuals. So it is with objective and many minds. They are kept together with a common name because of the emphasis they involve. The more they are considered, the more closely they may appear interlinked, like a man's walking and his path. They may even seem, given facts as they are, the one to imply the other. That is, given a thinking or a walking man, we may be led to the conditions of his movements, and given these, we may be led to say that men *must* both think and walk. So ingrained is this habit in us, and so easy and natural, that we repeatedly make the mistake of supposing that the limitations of events produce them, al-

though we know perfectly well that they do not. Nothing is produced by the possibility of it even if the possibility has to be affirmed as essential and necessary. So, although mind is an appropriate name for both the objective and the many, we are not involved in a discussion of classes and individuals; and although objective mind may be claimed to be essential and necessary to many minds, we are not confronted with a problem of deduction. We are at liberty to take many minds just as they are, and need not be troubled by the fact that mind may be a name also for something else or by the fact that they must somehow have been produced. A discussion of many minds should begin with the many, not with the one, unless that one should happen to be one's own.

And what we propose to say about many minds may be summarized in the beginning. Many minds are many men and many men are many bodies of a certain sort. The interplay of a man's body with the world about it is not only a matter of giving and receiving impacts, but also a matter of perceiving, remembering and thinking, making up an individual's perceptions, memories and thoughts. These, in sum, are taken to be a man's personality, self, mind or soul, and raise naturally a consideration of the relation of the soul to the body.

This relation, however, does not present a problem to be solved, but a fact to be stated. The soul is united with the body and we noticed that its union is also a union of the body with the rest of things. And this includes both the simultaneity of the soul with the body and the location in it; for the events which constitute the soul's life are, like all other events, events in the world to which the body belongs. The problem of the relation of unity equals to one another, so far as it is definable analytically, is the problem of the relation of many bodies and not of a juxtaposition of isolated souls. So far as it is more than this, it is not a metaphysical matter, but a matter of science, morals and religion. These are the themes to be developed. The attempt will be made to develop them largely independent of the preceding chapters, and this element will involve some repetitions.

II

We began, then, with many minds. We take them for granted as just so much you and me [illegible] together in a world which is both the theatre of our performances and the object of our interests, hopes and fears. We would start with these as just that, knowing full well

neither believable nor intelligible. Were this a matter of belief only, we might be under an obligation to criticize it. But since it is a matter of intelligibility also, that one fact is criticism enough. Many minds and one world can not afford a problem unless they are given to begin with in some other shape than a gratuitous assumption. So we begin with them.

Only, in so beginning, it is well to remember that we begin with many men. Some etymologists affirm that man and mind are kindred words. If this is true, we might take it as an evidence of natural wisdom, fancying that beings intelligent enough to name themselves, were keen enough to name themselves appropriately. Varieties in human speech forbid our taking the fancy seriously. Yet we may take it as significant of the fact that while man may be courteously said to have a mind, he does not have it by some addition to his being. He is, rather than has, a mind. He may be analyzed into mind and body along the lines of his activities without, however, finding mind and body to be two distinct and substantial elements of his composition. As a being he is one and undivided. And as a being he is related to many other beings in many ways. The events of his life are bound up with the

events of other lives and of the world in which he lives. What he perceives is his own body as a shifting center in a changing horizon where earth and sky meet and under the dome of which day succeeds day with varying scenes. What he remembers are happenings beneath that dome. Placed in that focus of things which his body marks, he thinks beyond the limits of his horizon and the days he passes within it. He is a mind.

When he is led by the interests and perplexities of his experience definitely to regard himself as such, and then turns to explore his mind, he discovers that he is only exploring his world. Shifting his attention from it to himself has given him no new and unexpected subject-matter. There is still the same world, the same scenes, the same events. Let him stretch his ingenuity as he will, inventing hypothesis after hypothesis, he is inevitably driven to recognize that he does not thereby find some new subject-matter nor any peculiar object he can identify with his mind. He finds only what might be called the insistence of his body. It obtrudes itself and gets in his way. It is bound up with a profound relativity in the scheme of things, a relativity so profound that he will likely, time and again, make it the first principle of his philosophy. The moon

follows him when he walks and stops with his stopping. His body's motion and rest are so perplexingly bound up with the motion and rest of other things, that he despairs of hoping to find in his infinite universe a fixed frame of reference for computing even such apparent regularities as the glowing bodies in his sky present to his vision. The splendor of the world vanishes with closed or defective eyes. Its harmonies and discords become mute with stopped or damaged ears. Cold, heat, tastes, smells, hardnesses and softnesses, pleasures and pains—all seem robbed of stability through the varying dispositions of his body. And that curious body of his often tricks him, making him see things crooked and even things which he says are not there. Its diseases seem to infect the whole ordered scheme of things with insanity. And, to crown all, his body may be reduced to such a state that the universe for him exists no more. It is this insistence of his body that he finds and not an object he can call his mind.

Thereupon there follows the great dichotomy of his existence—*the* world and *his* world. What he perceives is *the* world, if his body does not insist, but if it does, what he perceives are *his* perceptions. Similarly what he remembers become his memories, what he thinks

of, his thoughts, and what he experiences, his experiences. Robbed of the possessive case, he is robbed both of manhood and mind. With it, he rises to the proud profession that he can discover what *the* world really is, or sinks to the desperate admission that everything flows, nothing abides. The point here is, that it is the body's insistence which is responsible for this dichotomy. Disperse it—and this, it seems, is something that certain drugs, ecstasies and dreams can do—the world rolls on undisturbed by the intervention of an individual mind. There may still be thinking, but it is as if things thought, unfolding their connections as a flower does its petals, without the effort of a thinker, or as mystics say the world presents itself to the contemplation of God. But restore the body to its insistence on its own relativity amid things, then thinking is individualized and marks the humbler efforts of a man to inquire and comprehend. So it is that by passing from the unpossessed to the possessed, from the impersonal to the personal, and this through the insistence of the body, that we pass to many minds. They are not discovered by any deduction from the one, nor by finding them resident in bodies or, like spiritual shadows, attached to them. They are discovered out of the body's relativity.

Many men, therefore, in so far as they are many minds, are many bodies. But these bodies are of a particular sort. Their relativity alone is not enough to define them, for all bodies have that, whether they are men or not. Motion and rest, when logically considered, are absolute and antithetical. Clarified in the light of their ideas, they give us quantitative and exact determinations, free from all relativity, so that Achilles's capture of the tortoise can be neatly formulated in their terms without involving the insane obligation of trying to deduce his relative performance from those necessary and changeless conditions without which the capture could not occur or be quantitatively expressed. These conditions govern, as we say, the motions and rests of all bodies, no matter how relative these latter may be to one another, the body of Achilles as well as the body of the tortoise. So we seem forced to affirm the relativity of all bodies, not only because we observe it, but also because we are constrained thereto by the logic of events. For it seems quite clear that in a world where there was no logic of running, Achilles could not run. So the relativity of bodies is not something peculiar to some of them. We can consequently say, without getting confused by a metaphor which implies that a man's eyes

are already in the world, that the world must look different from different points of view. The moon will follow and stop with a river's movement as readily as with a man's. Accordingly, while his body's relativity is responsible for the discovery of a man's mind, he will hardly take it alone as distinguishing his body from others.

In fact, bodies are never distinguished in that way exclusively except for the science of their motions and rests. Then it is important so to distinguish them and be as rigid as possible about it. Aristotle might say that a body stopped moving because it got tired, having exhausted its power of movement. This is so true that it seems foolish to deny it or to accuse him of folly in affirming it. The defect of falsity does not mar it. Defect arises only in view of what one expects to have follow upon the affirmation. If that is something quantitative and the prediction of the moment when the body will get tired, Aristotle's affirmation is useless. By disregarding it and turning to other considerations, the science of motions and rests has won a glorious success. But it need not commit the sin of pride. Bodies are very much more than what that science declares them to be. They still get tired and will continue to seek their appropriate places

long after the science is finished. To be a body, or an aggregate of bodies, in motion only, is to be neither a man nor a mind, although both these are a body in motion beyond any reasonable doubt. It is difficult not to be impatient with those who seem to forget this. Their thesis seems so unreasonable and absurd. It is hard to believe that they believe it. They win their success by forgetting something and then appear to believe that what they have forgotten is negligible. They forget, for example, a man's purpose in walking in order to get his walking in quantitative mechanical shape, and then seem to believe that his purpose is not relevant to what he does. But a man's body is evidently much more than a moving machine.

Bodies have their relativity of time, place and motion, and they have it in their own right, so to speak. They have, no less in their own right, their qualities and organization. One may affirm this in the face of every denial of it, confident that the affirmation can never be disproved. This confidence rests on more than an appeal *ad ignorantiam*. It isn't ignorance which supports it, but analysis and knowledge. We may call it a necessary presupposition of sciences which are not exclusively quantitative, and imagine that, thereby,

we have reduced it to something arbitrary or convenient. Yet every reflective person knows, even if at times he may be beguiled into forgetting it, and knows as well as he knows anything else, that the presuppositions which are validly necessary for any science are determined by the necessities of its subject-matter and not by him. It is *his* presuppositions which may be arbitrary and convenient. He may *suppose* to his heart's content what things are, but only in proportion as he supposes *what* they are, does he approach anything which can be called truth. We may as well admit it. We may even be content to call it an animal faith which is unaccountable or to which we cling either by instinct or practical necessity. It is, however, *an* animal's faith which is driven deeper into him by every piece of knowledge he believes he has validly won. Necessary presuppositions of knowledge are not first invented in order that we may have knowledge afterwards. They are accepted because analysis of subject-matter forces their acceptance upon us. That is why confidence in them does not rest on an appeal to ignorance.

The same conclusion could be reached dialectically, as Plato and others after him reached it. We leave that to them, realizing that a modern metaphysician must be analytic

and empirical. And it is empirical enough that presuppositions of any account are derived from subject-matter by analysis of it. So we affirm that bodies have both qualities and organizations because these things can not be analyzed out of existence. Hydrogen is sour and a frog's egg has a specific organization without which it could not grow into a frog. So man's body has a specific organization. So his own body and others too have qualities. These facts are of consequence in his being a mind. His body is organized in relation to qualitative differences in it and in the world, and also in a manner which renders his responses to stimuli selective, coherent and unified. He has sense organs and a nervous system, and these are very nicely knit together. His body, like other bodies, may be blown about by cosmic winds or pulled by gravitation, but it sees, hears, tastes, smells and feels, and builds a shelter from the wind and uses the earth's pull as a crutch on which to lean. This is what distinguishes the relativity of his body from that of others, and convinces him of his manhood and mindedness. This eases his relativity, so to speak. He finds that he can use the general flux of things to advantage. He can make it minister to his practical needs and make it also so sharpen that distinction

between *the* world and *his*, that he dares to hope that he can find in the former an intelligible place for the latter. His body seems to be privileged. Through it pass the currents of existence and there is perception, memory and thought. And all this seems to have happened naturally, simply by there being a man's body relative to other bodies, with a quality and organization suited to interplay with their qualities and organizations.

In terms of the preceding chapter, we might venture the claim that wherever there is translation, wherever there is communication or interaction of one form converted into another form, there are the rudiments of a mind. But the impressive instance of such conversion is man himself. Many minds are many men. But many men are many bodies of a certain sort, with a particular constitution and organized in a particular way. They interact with other bodies about them. And the peculiarity of their organization is such that they constitute highly integrated centers of communication. They make the realm of being they inhabit available, so to speak; but they make it available each from its own individual position. Much as a lens, interposed among the rays of light which proceed from a luminous body in all directions, may focus those rays

in a picture, so these bodies, interposed within that ceaseless change of things which is yet a system of ideas, may focus its implications in rational discourse. Many men are many bodies.

III

Why such bodies exist, is a question which ought not to be asked, unless the asker is clear with regard to the kind of answer he expects. Otherwise it may provoke folly. Why anything exists, is a problem not likely to receive any satisfactory solution. Speculations with regard to it may be fascinating, but they must be set down as futile. All existence may be an evolution out of the homogeneous, or may be the creation of God evoked out of nothing by the power of his word. There is, however, no rational construction of either miracle. To carry back all existence to some primordial existence, no matter what, leaves existence a problem still. And to carry it forward to some end which makes it what it is, has the same effect. So far as primordiality is concerned, the present has a better claim than either past or future, for an event must happen first before it can have happened, and it will happen only when it does. It is quite profitless to

search time for a first beginning or a last end, or try to convert the historical sequence of events into a chain of causes on which existence somehow hangs. The question of the existence of our bodies does not admit an answer of the kind implied by the preceding sentences. If, however, the question expects an answer in terms of our natural history or of the consequences which flow from our being what we are, then there is much to be said in reply. Our bodies have been produced in the course of nature and, once produced, many consequences have flowed from them. All this has afforded a rich field for inquiry the results of which are increasingly illuminating. They require no summary here. For we take the existence of our bodies for granted, content to leave the matter of their genesis with the biologist and the historian, drawing on their results only in so far as they help to clarify the particular interests we have here in view. There is, however, a general consideration in connection with the genesis of our bodies which is worth attention here, namely the bearing on metaphysics which its complete exposition might have.

We are concerned with living bodies and particularly the bodies of men. How such bodies have come to be, what factors have en-

tered into their composition, and how these factors have conspired to produce the astonishing diversity of living forms known to our planet, are among the most alluring of questions. That there has been an evolution of living beings, at least in the sense that the more complex forms found to-day have not always existed, but have been derived by gradual or sudden changes from other forms akin to them, seems evidently to be a fact of natural history and not a theory of biologists. Furthermore, that life is, at bottom, continuous, and that all its forms own, historically, a common ancestry, is a tempting hypothesis to entertain, although it is very far from being unequivocally supported by the facts. Our difficulties are not with evolution as natural history or with kinship as linking together large portions of the plant and animal world. They are rather with the theories which these facts may be used to support. The supposition of the continuity of life often looks as much like a survival from primitive cosmologies as it does like an hypothesis which the facts naturally suggest. Life may have originated in more than one place and been distributed from more than one center. The question of the origin of life is, moreover, easy to ask and easy to debate, but it is not easy to under-

stand. For the literature on the subject does not make it unequivocally clear just what it is the origin of which we are seeking, whether of "living" or "life." And this makes considerable difference. If the terms are synonymous, if living and life are both a matter of organization—or, as we have said in another connection, a matter of being in order—the direction of our interests and inquiries is obviously different from what it is if they are not. There is a metaphysical question to be answered first before that of the origin of life can be intelligible. If life is not organization, it is difficult to see why an experimentalist should not admit it joyfully and admit even that life is wonderful and responsible for all its varied forms by some entelic energy of its own. It is difficult to see also how such an admission can affect his business, for it definitely puts life out of the region of experimentation. He can not experiment on something which is not subject to experiment. It may, like space, be always there, and, like space, be the universal condition of all forms under it, but as the geometer experiments on spatial forms and not on space, so the biologist would experiment on living forms and not on life. If, however, life is organization—and this is likely, because when we are too much out of order we

die—it will be difficult to convince the experimentalist that he will never find its origin. He will be expecting it any day.

Yet in either case, what is often called "the secret of life" might be discovered just as many other "secrets" have been, that of oxygen, for example. Oxygen can be produced in a laboratory, and so may life. It seems rather willful to claim that it can not. But the production of life artificially, even in imagination, still less in fact, ought to have no other metaphysical consequence than confirming the conviction that life is a matter of organization and not a teleological fluid which arbitrarily cuts its own channel. Vast and inscrutable as nature may be, man has gained considerable control of her forces. Although he himself is a product of nature, he has that power to do things which leads us to say that he supplements nature with art, doing by his ingenuity what nature does without it, and often what nature, without it, might never do. He is a worker of wonders. Since he can vary species through selection and is pushing his synthetic chemistry to the manufacture of substances once thought to be unique products of life itself, it may well be that he will eventually discover the secret of life and be able to make in his laboratory individuals that live without

the help of ancestors. Such individuals would be living bodies. And it is unreasonable to suppose that they would differ in any essential way from similar living bodies produced by nature. Granted even the artificial manufacture of men, it would still be men that had been produced—poets, philosophers, scientists, saints and criminals—each made to order, if you will, yet each a man with a man's body and a man's mind, reacting as a man does to the world in which he lives, worth sending to college, perhaps, or electing President of the United States of America. Art pushed to its extremity will never overleap nature. Even a god, omnipotent enough to make all things, and scientist and inventor enough, would have to make them what they are or they would not be what they are. To create life would not annul the difference between the living and the dead.

But one need not let the imagination run riot in order to win the conviction that the discovery of causes and the control of their operations by art, can not possibly make any metaphysical difference to existence. There is the highest intellectual satisfaction in reducing complexities to simplicities and in finding common denominators for the fractions of existence. Thereby understanding of things and control of them are reached. Change and

the flux find a common medium for the expression of measures and amounts. The multiple forms of communication become coherent and integrated. But the essential nature of existence has not been thereby changed. The subject-matter which has yielded to all this simplification and elaboration remains precisely the subject-matter it was before. A color does not cease to be a color by being translated into physics and a man does not cease to be a man by being translated into chemistry. It may be that we are angry because we secrete adrenalin and sorry because we cry, but anger and sorrow are anger and sorrow still. They can not be put out of existence by being put into it. Given the completest mastery of things attainable from the completest knowledge of them imaginable, life would still remain an enterprise to be actively lived and construed in terms of what it actively is. Metaphysics has to remind us of all this from time to time, not because there is any real doubt of it, but because knowledge is so illuminating and powerful that we often fall under a kind of spell, forget that it is knowledge, and imagine that it is a kind of magic which makes its own subject-matter disappear. Knowledge is *of* its subject-matter. The latter can not disappear without the former disappearing too.

IV

Although minds are men and men are bodies, we do not seem able to say, with any show of intelligibility, that minds are, therefore, bodies. Such an equation has never been made without qualifications which make it ambiguous and illusory. The body can not swallow the mind or the mind the body without everything being swallowed in the maw of nothingness. We really ought to be amused at all attempts at this deglutition even when it is as natural as any other over-eating in the presence of alluring food with companions a little sportive. Health and morals are against it. As for intellectual health, we can not play fast and loose with the body, taking it as a physical object in the external world with its obvious physiology, and then using it to prove that we perceive it as a phenomenon in an internal or different world of mind; and we can not play fast and loose with the mind, taking its perceptions as so much conscious havings and using them to project the body into an outer world where it may be the physical support or counterpart of their existence. It is fascinating, but it is not healthy. And as for morals, men naturally protest against the identification of mind and body, in the interests of decency at least. Men

have sacrificed their bodies for their minds' sake. Minds are readily conceived to be immortal, but bodies have to be resurrected and changed to be that. Human beliefs in this matter follow a natural propensity. The expressions of them may often be ridiculous and unbelievable, but the ground of them is, apparently at least, a solid fact of experience. That the body perceives, remembers and thinks, is a fact needing no proof. The consequences of its doing this, however, are such that they naturally refuse to be identified with the body itself. This, too, is in no need of proof. These consequences make up what we call a man's mind. They comprise his perceptions, memories and thoughts, his whole psychic life, his whole soul. They make him a personality. They render him such a figure in the cosmos that he can hardly fail to regard himself as the top of creation, for, although his life may be short, its quality would not admit anything less than immortality. He is a soul. And that one word may suffice to push the estimate of him up to kinship with God or down to an ironical incident in a sportive nature. But to identify his soul with his body both shocks and bewilders him.

The presumption is that it is not to be so identified. This may be one of philosophy's

last words. Faced with the alternative between the absurdity and confusion which the identification involves and the admission that here is a riddle past solving, philosophy has usually accepted the latter. It seems better to be ignorant than to be unwise. Yet it is questionable whether there is any riddle here at all. The relation between soul and body may not be a problem crying for solution. The alternative between absurdity as a consequence of trying to solve it and agnosticism as a consequence of rejecting all solutions, may confront us only when we let it. The problem may lie in the alternative itself. For if soul and body are as different as they obviously and admittedly are, and if they coexist without any apparent difficulty on their part, as they do, *our* difficulties may be of our own making. The conversion of a fact into a problem needs some motivation. Aristotle long ago remarked that while many people are surprised because the diagonal and side of a square are not commensurable, a geometer would be surprised if they were. Surprise in such matters evidently depends on the point of view. One will not needlessly waste time and materials trying to extract the square root of two, if one will only let a square be a square. And we should, doubtless, stop trying

to extract the soul from the body or the body from the soul, or stop believing that the extraction is a problem even if it can not be solved, if only we would let things and events be what they are. It is the insistence that they must be different that is the cause of our metaphysical troubles. If we so conceive the universe that the seat of the soul becomes a problem, we shall never find for it either stool or throne. That seems certain. It is better, therefore, to give up trying, and, instead of taking the failure as a recommendation to despair, take it as a recommendation to conceive the universe differently. The result may be surprising in view of our former conception, but it can hardly be more surprising than that the soul should sit on nothing at all. Perhaps, however, it is a little silly to talk about surprise. Metaphysicians, at least, should be surprised at nothing, unless it is in Aristotle's sense, namely that things and events should be different than they are.

It may well be that the relation of soul and body is not something which ought to be fitted into an antecedent metaphysics, but something to which any eventual metaphysics ought to conform. It may be fact instead of problem. It becomes a problem only when it is not taken as a genuine fact together with its con-

sequences. We may balk at these latter because of habitual prejudices, but it is worth while to look the fact in the face and see what may be made of it. For we are all faced at last with a basic contention of philosophers that whatever the world is discovered to be, it is a discovery of man as mind, and that, consequently, it can never be less, although it may be more, than what his discovering of it implies. This contention is often irritating, especially when it is employed to invert the natural order of things and unintelligibly turn the whole of existence into a curious, mysterious and misshapen product of man's thought alone. Yet it requires a willful neglect of the obvious to deny the contention itself. We live in no other world than the world of our experience and as we experience it. Our life is complicated enough and our ignorance is vast. It is not, however, too bold to affirm that the chief cause of our difficulties in metaphysics, lies not in the obscurity of things, but in our too frequent refusals to take them literally as they are. What we repeatedly need is at once the most naïve and profoundest realism we can express. Especially is this needed when there is question of the relation of mind to body, for here the tendency has been too prevalent to distort facts in favor of hypotheses

which their makers have assumed to be necessary in view of some antecedent metaphysics of their own. Accordingly the attempt is here made to deal with the relation of mind to body, not as a problem to be solved, but as a fact to be stated.

Briefly, the statement is this: the union of the soul with the body is a union of the body with the rest of things which issues in events which are events in the world which the body occupies. Soul and body do not give us two diversities first which must be united or related afterwards. They constitute a reciprocation in existence. This the body mediates, but the reciprocation itself is as objective as any other. This is the obvious and natural fact. No attempt is made here to explain or account for it. The contention is, rather, that mind or soul, in the individual sense, is a natural event, something that happens in the world, and that it is as legitimate to construe the world metaphysically in terms of this event as it is to construe it in terms of any other event. It is not legitimate to make this event exceptional or to construe the world metaphysically independent of it and then try to find a place for it. The soul depends on the body as a bird's flight on its wings, but as the flight is not the bird, so the soul is not the

body; and as the flight occurs in the world which the bird occupies, so the soul occurs in the world which the body occupies. We may invert this and say that the world is the kind of affair in which the flight of a bird and the soul of a man are equally natural events. In itself it is fully as much what the man's soul implies as it is what the bird's flight implies. To exalt either over the other is, in metaphysics, unpardonable.

What we see, hear, taste, smell and touch, what we suffer and enjoy, what we remember and imagine, what we think about and inquire into—all this, we can convince ourselves by a thousand experiments, is so united with and depends on the body, that it thereby receives an individuality all its own and varies or vanishes with the body's condition. In these experiments no hypothesis is necessary to make them intelligible. We need only close our eyes or stop our ears. If the world as we know it —or as we are said to experience it—with all its richness of content and context, its variety of scenes and events, its hopes and fears, its joys and sorrows, is what we call the soul's life as concretely and individually lived, then the union of soul with body is not a supposition, but a fact. And these same experiments which convince us of this fact are experiments in the

very world which is at once the stage and incidents of the soul's life. It is the world we investigate and explore. We write its history. We discover the formulas in terms of which its operations may be expressed. It is the world which the body occupies, in which its place and date are fixed and its relation to other bodies determined. This too is fact, not supposition. One may dogmatically affirm that there is not a shred of reliable evidence to prove that our experience is something added on to existence or something set over against it. All the evidence goes to show that our experience is a matter of existence itself, a mode or manner of it, one might say. If we are not surprised that a nameable something may now exist as a solid and now as a gas, we ought not to be more surprised that nameable somethings may now exist as bodies moving in space and now as things perceived in an individual soul. The former is no less a miracle than the latter, and nature works both of them. And so, although the soul is united with the body, the union does not disrupt the world or make of a man's mind a realm of being which his body does not occupy.

Indeed, it is very doubtful whether we have in this matter of the relation of mind to body —when a man's mind is stretched to cover the

sum of his perceptions, memories and thoughts —anything which, as a union simply, is exceptional or unique. We discover no existences absolutely isolated and set off completely by themselves. Individuality and continuity go hand in hand. The only absolutes are the structures to which we find this varying world conforming. So we may readily conceive that the whole world as determined by an individual object in it, is at once that object's world and the world which that object occupies. An atom as well as a man is the universe individualized. One is tempted to borrow the figure of Parmenides—being is a sphere whose center is everywhere—for it admirably combines structure and individuality. Define the universe at all, he would say, and it is defined as a sphere, but it can not be so defined except from a given center. In some such way all things seem bound together. If such be the case, then the union of soul and body is but one instance of a general type of union, peculiar only in its own individuality. And as we can not from one sphere deduce many centers, nor from many centers construct one sphere, so from one world we can not deduce the worlds of many minds, nor from these construct one world. The one world which is not yours nor mine nor the atom's, can be only

something analogous to the one sphere which is not the sphere of any individual center, but the geometrical structure to which all spheres conform. The world which is nobody's world —the world in itself—would seem to be either nothing at all or a system of structures.

General metaphysical considerations like those of the preceding paragraph may aid in emphasizing the fact that the union of soul and body is, as a union, not unique. It has many illustrations. The repeated recognition of them in the history of science and philosophy could be demonstrated whenever inquiry has crucially faced the facts of individuality and continuity. That there should be many minds and yet one continuous realm of being, is no more strange or mysterious than that there should be many numbers and yet a continuity of number, or many atoms and yet one physical world, or many organisms and yet one environment. If there is mystery at all it is in the facts of individuality and continuity themselves. But this mystery we are not likely to remove. For we do not succeed in deducing individuals from a continuum or in building up a continuum from individuals, pack them as tightly as we choose. There can always be one more. And there can always be one less until we come to zero, and then

there is neither individuality nor continuity. Then there is no possibility of affirmation or denial. Subject-matter has vanished and inquiry ceased. Consequently we seem to have faced in the union of soul and body, as in the union of any individual with the continuum to which it belongs, something like ultimate metaphysical fact, something which does not call for explanation itself, but which is basic to all explanations which can be made. So we take it here and dismiss the relation of mind to body as a problem to be solved and let it remain a fact to be stated, accounting it no more strange than the whole of existence itself.

We may still speak of an "external world," if by that we mean a world external to the body, the world in which the body moves and lives and thinks. We ought not to speak of it as external to the mind. For that is meaningless, if indeed the mind is an event in the world which the body occupies, if it is genuinely something natural and a genuine reciprocation in existence. We court only confusion if we conceive the external world to be a place where perceiving, remembering, imagining, hoping, fearing, loving, hating and thinking do not take place and then invent another world where these events occur. With two such worlds we are never at peace. The supposi-

tion of them has never added a genuine increment to our knowledge. We may make it, but we must needs straightway forget it when we set to work describing and explaining the one world in which we live. But the external world as the body's world is fruitful. From it we have learned with some confidence the movements of the heavenly host. From it we may hope to learn with equal confidence the movements of a man's body when he winks an eye or when he solves a quadratic equation. Such a hope is extravagant only in view of the possibility that the requisite technique may be beyond our skill to invent. There is no logical or metaphysical extravagance about it. For the hope is like in kind with that which has produced what little knowledge of anything we have; and this little knowledge, with every increment to it, steadily confirms the belief that the order and connection of existence is discoverable no matter what surds existence may contain. Existence itself may be a surd, to be taken as just so much stuff to be named and described, but its order and connection yield equations some of which we have already solved.

Any one, then, of the many minds defined in terms of the concrete richness of a soul's life, is not strictly *in* any one of the many bodies.

It inhabits a body only through a kind of metonomy. The best proof of this, if proof is needed, is that, although a body, through contact with the world, may find its soul, no soul is found by searching the body alone. There is much to fortify the contention of psychophysicists that there is a parallelism between what they call the physical and the psychical. One might, conceivably, succeed in mapping out the whole brain cortex, locating with exactness centers of speech, of vision, of memory. One might find for every emotion an appropriate glandular secretion. But all such discoveries are very far from finding words or visions or the past in a man's brain, or mercy in his bowels. This might as well be admitted once for all with the recommendation to make no further stir about it. Autopsies reveal no soul in the body at all. That seems sufficient proof that it is not there. We may not, however, justly suppose that it has therefore fled like a bird from its nest, the soldier from his post, or the tune from the lyre, imagining that we might catch it, were we quick enough with our devices. Such imagery is apt enough if it serves to remind us that the soul is elusive when we try to catch it all by itself, or to heighten our appreciation of the glory the soul lends the body. These moral uses of a

figure of speech ought not, however, to lead us to adopt as fact what the figure logically implies. For the failure of autopsies is not a failure in quickness or precision. It is rather testimony to the fact that if we are to look for a soul, we must look elsewhere than in a body. As a matter of fact, no one looks for it there seriously. We look for it rather in human companionship and in the many possible sharings in a common world.

The body, moreover, is the best possible witness to the fact that it mediates but does not contain a mind. As already suggested, we may correlate with its parts the varied events and sequences of the soul's life. For it is the eye that sees, the ear that hears, and the brain that remembers. Histology may carry us to a refined analysis of these organs. Yet it carries us thither with no change in the character of the fact to which the grosser view is witness. The eye sees, but what it sees is incomparable with the eye. The brain remembers, but what it remembers is not like a brain. There is no qualitative identity between the body's anatomy and the soul's life. Few will deny this, for it is too evident. And it is equally evident that there is not in the body itself a substitute for the world it perceives and remembers. As we follow the body's performance when it is sub-

jected to stimuli, we find only what we vaguely call nervous excitations and these are, as the evidence seems to indicate, in all probability a form of electrical discharge. In sum, as our knowledge of the body grows in accuracy and refinement, the more it reveals the body as the receiver and transmitter of stimuli, as the mediator, but not the container of a mind.

One may readily provoke wonder that the body is so admirably contrived to do what it does. That the light from an object should be focused in an eye, that the eye should see the object and then the object be grasped by a hand or summon from the past some circumstance of long ago, is a miracle, if we will have it such. But it is only a natural miracle like the germination of wheat or the crack of thunder. Viewed thus as a natural event, the body is then seen to be nicely adapted for its performance. Many stimuli play upon the body. Its exposed surfaces are equipped with special organs for their reception and diversified appropriately to their differences. The stimuli, once received, are transformed into an energy which can flow to redistributing centers within the body, so that action may follow. Within the skull is stretched a mechanism by means of which the flow of energy may be integrated and controlled. This is all something that

actually happens. The contention here is, consequently, that the body's function is precisely that which it is discovered to have. If there is any miracle about it, we must seek that miracle in the world at large. For the miracle, if we will have one, is not that the body perceives, remembers and thinks, but that existence demands a body, if it is to be perceived, remembered or thought. But it is not profitable to talk about miracles. The fact we face is this: the body is discovered to be an agent solely for the redistribution of the world's energies; if we go beyond this, seeking to follow out the redistribution concretely and in detail and in all its variety, we must go beyond the body itself and seek its appropriate linkage with the world to which the body belongs. Then the body is discovered to inhabit, not an inaccessible world, but an intimate world of qualitative richness and linked events. It is only by correlating the body's organization with this richness of quality and this linkage of events that we approach any understanding of how it is that we perceive, remember and think. The continuity of subject-matter is not broken, but maintained to the end.

It is this continuity of subject-matter which becomes more and more impressive as we steadily contemplate it. We may qualify the

world by such adjectives as we will—internal, external, mental, physical. But it is one world which is so qualified after all. By making or finding distinctions within it, we do not break it into fragments which can never again be brought together. This we take to be as true of the distinction between soul and body as of any other distinction whatever. The utmost we can do in all our inquiries is to correlate the events relevant to any distinction with some center or agency with which they are connected. But the events are in the world which the agent occupies. An explosion is not in the powder, but in the world where the powder explodes. So we take the relation of mind to body to be, not a problem to be solved, but a fact to be stated, and stated in some such manner as has been here developed. We consequently do not hesitate to accept the sequence, many minds, many men, many bodies, provided that many bodies are not so construed in relation to the world they inhabit, that many minds become impossible or that they must be added on. The union of soul and body, as we said, is the body's union with the rest of things eventuating in a life the incidents of which occur in the world which the body occupies. The body may properly be called the agent and owner of these events, but

it is agent only in the sense that without it they would not occur, and owner only in the sense that its privileged and relative position gives it title to them. But the events of which it is both agent and owner are, like the flight of a bird or the fall of snow, events in the world at large. In other words, the body is not a mysterious agent which miraculously transmutes existence into something else; it is rather the obvious agent in consequence of whose relativity to the rest of things, existence is individualized as yours and mine.

V

In view of what we have now construed many minds to be, it is obvious that the relation of them to one another is not comparable to the relation of many bodies to one another. Indeed, whenever we conceive it to be comparable and proceed to work it out in any manner which stands the test of analysis and experiment, we find that we are dealing with bodies rather than with minds. The question sometimes asked, how two minds can know the same thing, is answered by showing how two bodies can. All education and reading in common of the same books, all scientific experimentation and joint explorations, are ample

testimony of this fact. It seems quite gratuitous, therefore, for metaphysicians to belabor the problem how two minds can read the same book, when it is daily solved by librarians. There is, however, a fundamental misconception in remarks like these. Two minds do not read the same book, and many minds, being eventually the living of many bodies, do not do something to common objects. For again we insist that mind, whether objective or many, is never an agent and never an element which enters into the composition of a compound. Many perceivings and many rememberings are related as the bodily agents which perceive and remember are related. All this we expose in the writing of biographies and histories. We follow some individual from the cradle to the grave, exhibiting his contacts with places and people, in the expectation that thereby his soul's life will be revealed in its proper relations. And our histories are this procedure and this expectation extended to groups and institutions. To ask, therefore, how many minds are related to one another, is to ask a question which does not require a metaphysical answer. There are many minds. In their being they are the consequence of the logical structure of existence and the organization and relativity of bodies. That they are

such metaphysics seems competent to demonstrate. It might, indeed, venture to boast that, given a logical structure to the realm of being, any individualized action would be relevant to that structure, and exhibit on its part an example of reason and consequence and on our part an opportunity intelligibly to construe what had happened. If reasons can be found for events, it does not seem overbold to affirm that events are concretions of reasons, rudiments of many minds, so that full grown minds ought not to surprise us in a world so rich as ours in complex organizations. Granted that metaphysics might go that far, there would still be no problem of the relation of many minds to one another. Individual histories might be written, but they could be written only after they had occurred. No metaphysical analysis of the fact of many minds could possibly be competent for that task. The relation of one body, man or mind to another body, man or mind, if a metaphysical problem at all, is not exceptional, but general. It is the problem of the relation of individuals generally to one another, and this problem is solved in terms of the order and connection in which they are found. So far as many minds are concerned, the logical structure or order and connection of the realm of being, is sufficient answer.

It is clear, however, that many men perceiving, remembering and thinking in the world, are separate minds. Their souls know isolation. The privacy of mind is undeniable. Situated as we are, each of us must recognize that the sum of his perceptions, memories and thoughts, his whole soul, in fact, is something individually his, inaccessible as just what it is to his fellows. In the midst of society, he yet lives alone. In spite of all his sharings, himself he can not share. The theme has enriched literature and the fact is evidently one of the wellsprings of religious feeling and of the expectation of immortality. Wisdom advises that we leave it for poetry and religion to express, believing with much supporting evidence that it then finds its most adequate expression. Certainly it finds in this way its most widely acceptable human response. For my part, I can not escape the conviction that there is a monstrous absurdity in turning it into subject-matter for so-called scientific inquiry. It is easy to write as if we were able to picture these many minds, each with its own world and each with a world different from all the others, and then ask the troublesome question, How can these separate and isolated worlds all coexist? Where can they all be? How can they own a world in common? These questions

have been asked and the answers to them have witnessed their futility. The privacy of minds may be admitted fact, but the picture of them, so related as to make such questions as these intelligible, is a picture without an original. Back of the picture lurks, I suspect, the notion that many minds are after all just so many pictures of the world their bodies inhabit, pictures hung in brains or on them, invisible to all save their owners. But many minds do not exist after that fashion. There is no wall to hang them on side by side, each in its separate frame. We may say, adopting an ancient figure, that they are existence many times reflected, but these many times cry no louder for juxtaposition than does the many times reflected landscape in a thousand raindrops.

Defined at all, the privacy of mind is defined in terms of the privacy of the body, in terms of the sheer fact of the impenetrability of individuals. A line of given length may have its half, third and quarter point, without ceasing to be the line it is, without confounding a half with a third or a quarter, and without raising the question how the half, third and quarter are related independent of the line. So many men may be individually mindful of the same world without thereby breaking up that world into unintelligible plurals. Their bodies have

a likeness to the points on the line. They may halve, third, or quarter the world without taking out the half, third and quarter to be put side by side somewhere else. Their differences from one another are the world differentiated. We bid our neighbor come and see, believing that in our position he will have a new vision of things which is *the* vision of them could he take our place. But he never can fully take our place because his body is not ours. With the recognition of this simple and common fact, there seems to be no reason why we should turn the privacy and impenetrability of many bodies into a picture of souls which are both shoreless and islanded and yet must be located geographically in some common ocean.

The serious questions regarding the relation of many minds to one another are obviously social and moral. Were there but one mind—the supposition is itself full of difficulty. No doubt each of us can imagine himself the last of the race, the sole surviving spectator of the world in which he and other men have lived. Having attained that sublime isolation, he might ask himself the questions which moralists often put into the mouth of the castaway on a desert island. Deprived of all human fellowship, what would our opinions and judgments be? Should we still have curiosity to inquire?

Should we still be worried about good and bad, right and wrong? Should we maintain our manhood or seek companionship with brutes? How should we meet our end—with stoic fortitude, with irony, with blasphemy, with the expectation of meeting our maker? So to imagine our being and asking is, however, very far from conceiving what the world would be like with only one mind in it. For to be the last of one's kind is not to be an instance wholly unique. It is difficult to find in loneliness alone the example of an only mind. Perhaps it is useless to try to frame an example, for, dialectically, an example implies a universal, and, analytically, we should doubtless find ourselves simply trying to define what it is to be a mind. Yet this issue may be enlightening. To be a mind is to be a body perceiving, remembering and thinking. It is, as we so often say, to experience a world. There is already the germ of sociability in that. It involves exchange, communication, translation, language of some sort—a kind of sociability with nature, so to speak. Many minds involve this sociability enlarged and itself exchanged. The problem of many minds in relation to one another is thus the problem of many men leading a social life. And it is clear that it would be a moral problem also. For,

as we have said, a man involves the distinction between *the* world and *his*, and it is evident that if a man owned nothing, moral considerations would not bother him. It is the sense of possession, from his skin to his actions and ideas, which generates in him the haunting conscience of what is due.

Thus it is that the problem of the relation of many minds to one another is a moral and social problem generated by the fact of their existence. We need seek no other origin of it. The conception of man as originally unsocial and unmoral with the necessity of some imposition to make him otherwise, is a conception of what man is not. His problem is native to him. The profound sense of it and the inevitability of it rarely wholly escape him. It may make him coward, hero, rebel, martyr, sinner, saint. He dreams of utopia, hell, purgatory, paradise. Since his existence is dramatic, it is no wonder that in the sublime moments of his imagination, he should dramatize the universe, or believe that somewhere in the nature of things there is something which has called him to his destiny, the masterful forces of fate or the wisdom and love of God. He knows religion. For his world, being won through exchange and communication, is, in spite of his property in it, a borrowed world.

calling for repayment, dust to dust or spirit to spirit. Stripping the myriad examples he gives of the way a life may be lived from their irregularities and vagaries, we may say that essentially he is a being reflective and creative. He takes account of his world as so much material which he may remold in a fashion to satisfy both his reason and desires. So what he can make, whether it be a comfortable living or a theory of the universe, becomes more precious to him than the materials he uses. And nature has produced him—body and soul, a man who seeks for reason in things in order that he may lead a rational life.

VI

Minds, men, bodies—this is the order followed by analysis. There has been no intention to equate the mental and the physical or to lay a foundation for a materialistic philosophy. Alien to the fact of mind and body is any such equation. Although the union of mind with body is a fact, the mind is not in the body or identifiable with it in any intelligible sense. It is in the same world which the body occupies, mediated through the reciprocation of the bodily organization with the rest of things, but as much united with them as the body

itself, dependent as much on them as on the sense organs and the nervous system. No body alone can be a mind, can perceive, remember and think, or can have experience. It needs coöperation with what environs it, and it seems idle to deny to that environment the qualities and organization appropriate to such coöperation, or to divorce it from participation in what then eventuates. As for materialistic philosophies, we confess that we do not understand them, for with them "matter" seems to imply a distinction and at the same time to be the common denominator of all distinctions. The bodies of which we have written may be called, as chemistry and physics would have us call them, aggregations of matter. But when these bodies think, they do something incomparable with what they do when they walk. There, perhaps, is the gist of the whole subject. Thinking is as much an operation as any other working. It can not be divorced from its field, locked up in a prison, or assigned to some detached sphere. It is a participation in existence, define existence as we may. This chapter should be read in the light of the two which have preceded it. The analysis of mind carries us ultimately to the realm of being, to the recognition of its logical structure, to the fact that one type of

connection in it is translatable into other types. It is true that from objective mind, many minds can not be deduced. They are individual, focused and actualized instances of translation. If we ask how this is effected, we answer, through the mediation of the body. If we ask why such bodies should exist, we take their make-up and natural history as a sufficient account of their origin. We insist, however, that their existence and operations are relevant to the world in which they live.

Minds, men, bodies—this order of analysis is, however, one which the vital fact of being a mind tends to reverse. Metaphysical analysis may have the use of clarifying radical distinctions which we seem forced to make and of keeping them from getting in one another's way. But the real problems involved in being a mind are not settled by writing about them. In meeting them man rises from the fact of body to that of mind. He is inquisitive, social, moral, religious, creative. The universe he would have is not ultimately the universe which the metaphysician and others pick to bits and then put together again. He does that picking and putting in order that he may have another universe built upon that which he analyzes. He knows for a purpose. And were his knowledge complete, that purpose would

still control his living. He would still go on building out of what he knew a different world to live in. This he does even with his little knowledge and this reveals his essential nature. He is easily snuffed out of existence, but his life is a moral event in the universe which the chemistry of his body and the logic of his mind support. And being a moral event, the quality of his life transmutes the uses of matter into something with which they are incomparable. He may be Prometheus, working with stolen fire and doomed eventually to be blasted, but like him boasting that the great gift he gave himself and others was "to make them that die cease to look forward to their doom"—

θνητούς γ' ἔπαυσα μὴ προσδέρκεσθαι μόρον.

IV

APPENDIX

The articles to which reference is made in the Preface are the following:

The Field of Logic. *Science, N.S.* Vol. XX., No. 514. 1904.

The Nature of Consciousness. *Journal of Philosophy, Psychology and Scientific Methods,* Vol. II., No. 5. 1905.

The Problem of Consciousness. In "Studies in Philosophy and Psychology," a commemorative volume dedicated to Professor Charles E. Garman of Amherst College. 1906.

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